

Original Correspondence.

ON THE DEPOSITION OF COAL.

Notwithstanding the many and various speculations hitherto advanced on the modes of formation of coal deposits, it would appear that further investigations are yet required before satisfactory conclusions can be arrived at. Admitting this to be the case, I, therefore, ask permission to bring before your readers a few suggestions which may, probably, have a useful explanatory bearing on the subject. The region to which I am wishing to make such suggestions more particularly referable embraces Scotland and the North of England, with a little extension further southward into the Midland Counties. The principal marked conditions of ancient times to which I would briefly advert, in order to elucidate the subject, may be classed under the following heads:—Denudation, deposition, oceanic movements, and temperature.

The Scottish lands rise to a greater elevation above the sea than those of any other parts of Great Britain. In these lands the development of granitic and gneissic rocks is most remarkable. The Silurian strata occupy a considerable area in the Highlands. The Old Red Sandstone occurs to the north-east, and extends in a band from Stonehaven to Dumbarton on the west. In the valley between the Grampian range and the Lammermuir, Moorfoot, and the Ayrshire hills, rest the carboniferous rocks, which are made up principally of limestones and coal measures. Other still more recent formations are to be met with in Scotland, but are only developed in small patches. Advancing southward from Scotland to the North of England, we fall in with two chief eminences of the land—the Cumbrian group and the Penine chain, the former surpassing the latter in elevation. Bossive granitic protuberances appear in the Cumbrian group, around which the Silurian strata are laid; on these rests the Old Red Sandstone in irregular patches. Then succeeds the carboniferous limestone formation, which is considerably developed on the east towards the Eden, and on the Penine chain. Down the eastern slope of this chain, towards the German Ocean, the baset edges of the millstone grit, coal formation, and Permian strata, present themselves. The lias and oolites put on to the south-east into Yorkshire. To your geological readers I need scarcely state that the total series of rocks, from the highest mountain summits to the sea level, has been subjected to the denuding forces in a greater or lesser degree, but I would be disposed to think that even the best instructed among them may be liable to underrate in their estimates the extent of such a work of destruction. Suffice it to say, at present, that the earliest formations have been most reduced by denudation, because of being longer above water, and that those of more recent date have had their edges planed off backwards in a proportionate degree to their powers of resistance and the time exposed.

Deposition necessarily results from denudation. For all the while that the ancient strata, which were above the ocean, were suffering destruction other newer deposits were still being laid down. Thus the continued and concomitant processes of denudation and deposition have proceeded through a lapse of time of which we can form but very feeble conceptions. In this manner innumerable and repeated separations and re-combinations have taken place among the materials operated upon. One very marked general law seems to have prevailed in separating the materials into arenaceous, argillaceous, and calcareous members. This law has evidently prevailed, in general, from remote periods to those of recent date. Probably the most rational inference that can be drawn from this threefold division of the strata is, that the arenaceous deposits occurred in the sea, near the shores of the wasting land; the argillaceous more out seaward; and the calcareous still more into the deep sea. The two former deposits being of a mechanical sedimentary nature; the latter, more the result of chemical and vital agencies. Thus, in the course of past geological events we may reasonably conceive of three sea zones, off certain parts of the wasting lands, in each of which deposits of different characters were being simultaneously carried on. This being the case, an explanation is required respecting the alternating of the arenaceous, argillaceous, and calcareous deposits. A solution may, in all probability, be found by supposing periodic risings and fallings of the ocean. In the case of a periodic rise of the ocean the zone of arenaceous deposits shifts landward, consequently during such a period these deposits are widened in that direction. The zone of argillaceous deposits takes the same movement, therefore these deposits extend their dimensions landward also, and overlap the arenaceous ones. The limestone zone shifts in a similar manner, and causes the calcareous deposits to overlap the argillaceous. In the falling period a reversion of movement takes place. Thus alternations of the three deposits are produced over a certain range. Similar alternations might be caused by elevations and depressions of the land. I shall next make a few remarks on oceanic movements. To account for the risings and fallings of the ocean, the alternate periodic inundations over the low lands of each hemisphere, as pointed out in Augustus Bergh's essay, would meet the case on the grandest and widest scale. There is another motion of the ocean worthy of notice, which has evidently prevailed much in ancient times over the region which is now Scotland and the North of England. Its direction has evidently been from the north-west to the south-east. The great abundance of sedimentary matter carried to, and deposited on, the south-eastern flanks of the granitic eminences tend to show this. Moreover, the coarser materials composing the drift, such as boulders, pebbles, &c., which have been arrested in their course, further and fully corroborate.

Heat has been a wonderfully important modifier of the phases of matter in periods of the world's physical history long since passed by. When certain of the granitic eminences showed their heads above a very voluminous ocean, the manifestation of heat may be described as a general pervading high temperature. It may reasonably be supposed that these heads of granitic lands for ages attracted the water to them, to be sent off by evaporation; long, indeed, might they continue under such a state before they cooled down so far as to be capable of acting as condensers, and allowing the waters to run down them as streams. If such temperatures have prevailed, so as to modify the watery conditions of the wasting lands, as just pointed out, it may rationally be assumed that at one period the moisture permeated the soils and rose therefrom, in such a manner as to promote an extra luxuriant vegetation. This was undoubtedly the case on the Scottish lands in the coal era, when a considerable area was left exposed by a retreating ocean. Then were the soils, which were derived from the granitic, gneissic, Silurian, and Old Red Sandstone strata, clothed with an ultra tropical vegetation down to the sea margin. Supposing the lands thus burdened by vegetation, and that the oceanic waters of the globe were in excess in the southern hemisphere, and began to advance northwards, and continued to do so for some thousands of years, till the low lands of the northern hemisphere were inundated; then, during such a period, the vegetation of the Scottish lands was ploughed up, and carried away to rest in some sheltered and tranquil part of the sea. Again, in another period, when the waters flowed to the south, a replenished vegetation covered the soils that were left by a receding ocean, while the former vegetable wreck was being covered over by sediments, to undergo certain chemical changes, and be converted into coal. Thus, by repeated occurrences of this nature, alternating beds of coal and other sedimentary strata were formed. That part of the tranquil sea just referred to may be pointed out as the area of the Northumberland and Durham coal field. The Cumbrian group was also contributing its proportion of vegetation to the formation of coal; but this vegetation would probably be carried to the south-east, to aid in forming the seams of coal in the Yorkshire and Lancashire coal fields, although it is likely that some of it might find its way into the Durham coal area.

It may fairly be inferred that the lands of Scotland yielded vegetation at an earlier period than the Cumbrian group. The lower coal measures of Scotland corroborate this; so does the coal which is intercalated with the carboniferous limestones extending southwards into Northumberland. These flora-producing areas, now described, seem inadequate for producing a flora sufficient for the coal-making processes in the Northumberland, Durham, Yorkshire, and Lancashire coal fields, even if we bring to their aid other contracted areas that might be above water—for instance, the Lammermuir, Ireland, the Isle of Man, and the ridge of the Penine chain. From Great Britain, in the northern seas, other ancient lands may have existed, and may have been swept away by oceanic agency. It might not be too rash a speculation to suppose that the Grampian and Scandinavian may have at one time been united. Should such a supposition be considered too great a speculative stretch, it might with some reason be conceded that the gap between has been much narrower in early periods than at present. With a configuration of land somewhat allied to that now assumed, probably sufficient data might be arrived at to account for an adequate vegetation being gathered and carried into those areas of the Northumberland, Durham, Yorkshire, and Lancashire coal fields, so as to produce the coal therein deposited.

Such are the few suggestive ideas which I have ventured to bring be-

fore your readers. Should they afford any little aid in the prosecution of an enquiry into the subject of coal deposits and alternating deposits generally, or elicit ideas from any of your correspondents that may throw more light on the matter, then some advantage would be gained.

Bolton, Eastgate.

J. CURRY.

THE DIVINING ROD.

SIR,—I should scarcely have thought of addressing you on this subject, had I not good reasons to believe there are many who really place confidence in certain attractive qualities for minerals and metals which the rod possesses, and with the view of convincing such of their error the following remarks are offered. It is not my intention, however, at present to go into the question of certain subtle attractions which really do exist in nature, and which are partly understood by practical men, or to remark on the less familiar attractions about which very little is known at present except their bare existence, but to make a few remarks on the real causes of the peculiar motions of the divining rod, which are believed to be owing to certain attractive properties it has for minerals, &c. The usual mode of operation with the rod, when in search for a mineral vein, is so well known to practical men, that it needs no explanation here, any further than by barely stating it is imperative that it is held in the hands to operate; hence the hands must be either the medium suitable to the action of the attractive properties of the rod, whereby its attractive forces are brought into play, or they must be the direct causes of its motions. Now, I contend there are no proofs whatever that the hands are the mediums which in any way bring into action any attractions that actuate the rod; but that they are the direct and sole causes of the motions the rod makes, and that attractions from either minerals or metals have no practical influence at all on it; the motions it makes in the hands being simply attempts to regain its natural position, out of which it is being held by force. The proof of this I will endeavour to show, as well as the reasons why the rod operates in the hands of some and not in others.

The principles upon which the motions of the rod are actuated are purely mechanical. Every operator in curving up the forked ends of the rod for an axis acts upon the principle of making it coincide as near as possible with a plane that would cut it at all points longitudinally. In other words, that would present to the eye the appearance of a straight line only from either side of the operator, supposing the hands were transparent; and the twisting of the rod depends entirely on the near approach to, or deviation from, the plane described. If the operator curve the forks so correctly as to make the figure coincide with a perfect plane, as described, there will not be the least motion in the rod. If he curve it so as to make a near approach to the above plane, the rod will then have a slight tendency to move, the lines of mechanical strain from the forks of the rod to the point being placed in position to act. The angles of these lines, however, are as yet so acute that the power of the rod to move is very weak.

If he curve the forks so as to make the figure deviate from the plane yet more, the angles of the lines of strain will become more obtuse, in consequence of which will acquire greater power over the pointer, and so on in proportion to the deviation the figure makes from the true plane. In instances where the figure made deviates very considerably from the plane, the strain of the twist of the rod is so great that the skin is even taken off the operator's hands.

The above reasons account for all the motions the rod makes, as well as give the reasons why the rod will not turn in the hands of some, and why it will turn in the hands of others. The operator, then, that accidentally forms a near approach in curving the figure of the rod to the plane described above will not understand the art of dowsing (divining), for the reasons that in that position the angles of the lines of strain from the forks to the pointer are so acute that they cannot exert strain enough to turn it. On the other hand, the operator that accidentally curves the figure so as to deviate from the said plane will be a good dowsing, because the lines of strain being obtuse they exert the needful force to turn the rod.

Wenford, near Bodmin, March 7.

GEORGE RICKARD.

THE RICHEST MINE IN THE WORLD.

SIR,—With respect to the Gould and Curry Silver Mines of Washoe, to which you alluded in last week's Journal as being the richest in the world, I have the pleasure to forward you a few extracts from the company's annual report, which I have just received. They will prove beyond question that you have not stated any too much as to the Gould and Curry, and will, at the same time, show how much may be expected from the now celebrated Washoe district. It appears that 18 to 24 tons of second-class ore are now being reduced every 24 hours. It being of high value makes it necessary to be dry crushed, requiring extra care in handling, consequently more time, in order to successfully extract the metal: 60 tons of third-class ore, as usually worked by wet crushing, can be reduced with less difficulty in the same way. The high price realised for the ore and the extremely small cost of producing it you have already stated; but it may be added that the large expenses to the company for assays of ore and bullion will also soon be much reduced, a suitable office for that purpose having been built by the company, furnished with first-class fixtures, and experienced men to attend that department, and within ten days will be ready to do the assaying for the company, as well and correctly as if done in the best assaying establishments in Europe. A considerable amount has been expended in securing an additional quantity of fuel. The company have now fully three years' supply—an important matter, considering the scarcity and expense of wood near Virginia. The title to the mine, through the legitimate channels, has been secured by the company, and is to be sold to the most able and respectable counsel in the territory; the company, also, have strictly complied with the local mining laws. From the appearance of the mine, compared with its past history, there is now more metal developed and in sight than at any previous time. Richer bunches, or pockets, of ore have been found heretofore, but the bodies of ore are now of a better average value. As the company may soon reasonably expect to be free from all large extra expenses, considering the prospects of the mine, it may confidently be expected that the dividend account will be much increased for the year 1864.

AN AMERICAN IN ENGLAND.

THE MINERS' ASSOCIATION OF CORNWALL.

SIR,—Although the *Mining Journal* circulates through every clime, it is only occasionally I have been enabled to see it of late, in consequence of my having been travelling so much; but, being this day at Oporto, I found the *Journal* at the Exchange. The first thing that caught my eye was Mr. Charles Fox's opening speech at the meeting referred to. I was pleased to find he did not this year refer to Blondin and Brixham Cave, and toads in stones; yet it might have been interesting if he had treated on toads in deep stratifications, and informed us whether they were embedded there at the time of the deluge, or whether they were introduced by some other means. As regards the Cornish miners' association, I have no doubt they occur; as yet, in all my travels, I have never seen any, but shortly I intend visiting Etna and Vesuvius. Mr. Fox's observations on what Dr. Hutton and Sir James Hall say relative to carbonate of lime, when formed into rock in the interior of the earth, melting from pressure, cause me to conclude they must have been reading *Asop's* fables, over which they fell asleep, and, having suddenly partially awoke, wrote it before they had come to themselves. They give no proof of a single instance of rock ever having melted from pressure. Mr. Fox must be aware that there are two acting forces, centrifugal and centripetal, acting against each other. It is a query whether mountains, from their velocity, cause any considerable pressure; and it is to be regretted that Mr. Fox and his theoretical friends should endeavour to get practical men to believe that the weight of mountains cause a pressure, and result in their melting, and hardening in depth, as in nine cases out of ten it is found to be the reverse. Can Mr. Fox inform me whether volcanic rocks produce minerals, and, if so, will he be good enough to acquaint me where they are to be found, and I will gladly go to see a well-defined lode carrying a leader of any kind of ore in a volcanic rock. The iron found in Lake Lamond is nothing more than the result of Nature's daily work. The water is highly charged with iron in solution, and the gases from below produce something that cause it to precipitate or fall to the bottom, as iron does copper in water. When the iron that supplies the Lake becomes exhausted, something else contained in the water will be precipitated in the same way, and probably a new kind of layer formed. Cleveland Hill iron was formed in the same way; it is a natural process, and not the work of insects. Chemistry will never be materially advanced until some of Mr. Fox's pupils take a quantity of sea water, and add to it something that will cause all of one substance, and a portion of two others contained in it, to fall to the bottom, and crystallise into three distinct crystals, and form granite. This action will cease when one of the three substances become exhausted; then something should be added, as silica predominates in water, and will combine with other substances to form all rocks. The water in different parts of the ocean will, by Nature's processes, form every known rock, and the chemists should keep pace with the age in discovering Nature's laws.

Mr. Fox's remarks on Mont Cenis Tunnel cause me to think he had not then seen my last letter on that important undertaking. I am surprised to find Mr. Fox should have turned my bread into fish-pie crust. Bread is known throughout the world, whereas fish-pies only grace the tables of a few persons about Falmouth, and are not generally known in other parts of Cornwall. I, therefore, think bread, as named by me, would have been better interpreted. Mr. Fox will pardon my informing him that Cenis rock is not a schist, but a basaltic shale, that accompanies anthracite coals, and contains bituminous matter; schist contains little or none.

With regard to my data, which Mr. Fox complained of, I beg to say in my former remarks on the said tunnel I was guided by the maps, sections, and books of the company; the former showed the north tunnel to be in nearly 1300 metres of 3 ft. 4 in. each, or, in all, 4333 ft., which would be 722 fathoms; the books show the work to have commenced on Nov. 23, 1858, say, therefore, ten years since, consequently, if it is clear, on an average, they have not driven 9 ft. per week throughout the time. Mr. Fox's own figures show that only 1300 metres have been driven, and, therefore, the time occupied gives the quantity per week. I advocate effective boring machines, and am pleased to find

Mr. Cresce is progressing, but I feel convinced Mr. Matthew Loam will not adopt the Mount Cenis machine without modifying it considerably. In conclusion, allow me to say to Mr. Fox, and theoreticals generally, that their views being imaginary, and not the result of practical observation, tend to mislead weak-minded practicals, are ruinous to young students, and injurious to the public generally.

Oporto, Feb. 27.

N. ENSON.

MANUFACTURE OF IRON—REFINING AND PUDDLING SUPERSEDED.

SIR,—Some time since a process of subdividing metals in the melted state was patented by the Baron de Rostaing, and it appears that in developing that invention he has discovered a new process of manufacturing iron and steel, in which the refining and puddling processes are dispensed with, the results being, in the opinion of the inventor, a vast economy of fuel and labour. Now, as we all know that with many new processes the evils created are greater than those remedied, I should be glad to learn the views of some of your practical correspondents as to the applicability of this process, which certainly appears to me to possess many advantages, as compared with any process with which I am acquainted.

The Baron's invention consists—firstly, in agglomerating subdivided cast-iron (shavings, filings, dust, &c.), into a mass, which is introduced into a re-heating furnace, where, under the existing influence of the air and flame on a porous body, the particles of cast-iron are quickly decarbonised and transformed into iron; and, secondly, in submitting the agglomerated mass, as soon as it is raised to a white welding heat, to the action (moderate at first, and successively rendered more and more energetic) of a tilt or other suitable hammer, so as to closely unite the subdivided parts, and multiply their points of adhesion. After this operation, which may also be effected in a mould, under the action of a press, or by rolling it, in order to avoid the sudden impacts of the hammer, the agglomerated mass will, in the subsequent forging, be found to possess exactly the same properties as the ball or bloom which has been shingled or rolled after passing through the puddling furnace. The agglomeration of the subdivided cast-iron into a mass fit to be introduced direct into the re-heating furnace may be effected either in a cold or heated state.

When the agglomeration is to be effected by the cold way it is done by simply moistening it either with pure or acidulated water, or it may be with water containing any reagent in solution or suspension, and afterwards compressing it in a mould. The greater the compression the better will be the adhesion of the particles previously subdivided, and the mass thus formed should be dried either in the open air or in a stove. The addition of an acid or other reagent is intended for oxidising, purifying, or coagulating the materials. When it is desirable to use the hot way he introduces the subdivided cast-iron into a reverberatory furnace in as many separate heaps as it is desired to form distinct agglomerations or masses, in order to avoid having too large a mass, the separation of which would afterwards be difficult on withdrawing it from the furnace. In the case of agglomeration in the heated state the same furnace will serve the purpose of a re-heating furnace by raising it to a white welding heat. The agglomeration by a wet process and compression in the cold state determines a weaker or stronger tendency to oxidation, according to the quantity of water, acid, or re-agent employed; the subsequent action of the air and flame in the re-heating operation may be tempered by the application of coating of clay, silica, or lime, with which the mass should be previously enveloped.

But it is not alone to the manufacture of iron that Baron de Rostaing considers his invention to be applicable, for he tells us that his improved processes for the manufacture of steel consists in agglomerating the subdivided particles of cast-iron by moistening and compressing them in the cold state in a mould, as before described, for manufacturing iron, but instead of introducing the mass into a furnace directly in contact with the air and flame, on the contrary, great care should be taken to avoid fresh oxidation, which would destroy the proportions previously calculated (at the time of the compression in the cold state) to produce such or such quality of steel, according to the re-agents employed, and the progress of subdivision of the particles of iron, and the mass is introduced into a furnace to be melted, where the mass is heated to a white welding heat, and the particles are then dipped into a bath of dross or scoria, when the smelting is to take place in a reverberatory furnace, or introduced into covered crucibles when ordinary smelting furnaces for steel are employed.

Now, it certainly seems to me that a process which commences the conversion of the crude iron into finished iron or steel, with the crude metal in a finely divided state, must possess advantages as compared with those that commence with the solid pigs, and it is for this reason that I am especially desirous of learning the defects, if any, that are likely to be met with in this invention.—*Merthyr, March 14.* EVAN JONES.

ANOTHER PRODUCT FROM PEAT.

SIR,—As many of your readers take much interest in the treatment and application of peat, I take the present opportunity of calling their attention to a process of treating peat recently introduced by the Ostracher Kied Company, of Pfirngen, in Wurtemberg, which seems to me to possess the advantage that a marketable product will be obtained without the necessity of encountering the hitherto insurmountable obstacle of drying the peat. I fear that the proposition to use peat for the manufacture of iron is of little practical value, for it would require from 5 to 10 tons of peat, as taken from the bog, to smelt a single ton of iron, so that, although the price per ton of peat may be low, the enormous quantity requisite would render it anything but economic to use it.

The manufacture of lampblack from peat, and its products of distillation is entirely new, and this lampblack is far superior to that made from coal, coal tar oil, asphaltum, and all such matters. The peat tar obtained by the distillation of the ordinary peat, or of the condensed or solidified peat, may be repeated distillation and certain other processes be transformed into a variety of sub-products, such as photogen, paraffin, naphtha, and others; instead, however, of forming any of these products, this invention has for its object the manufacture or production from peat, from the oils obtained from peat, from peat tar, and peat asphaltum, of the substance known as lampblack, and the crude oil obtained by the simple distillation of peat tar is used in preference for this purpose. This lampblack may be produced in a vaulted chamber, along the side or sides of which pipes are placed, which pipes can be supplied with the crude oil from without the vaulted chamber. The pipes are fitted with a number of small holes or tubes, into which wicks are inserted, and which form in this manner a system of lamps. The admission of air is so regulated by means of dampers, valves, or gratings, fitted into the walls of the chamber, as to produce an imperfect combustion, and at the same time the largest possible amount of soot. For producing lampblack from asphaltum obtained from peat tar, a vaulted chamber similar to the one described may be used, the pipes forming the system of lamps being omitted. This vaulted chamber is connected with a flue, into which the heat, when heated to a red heat, the asphaltum is thrown in lumps. The asphaltum will suddenly ignite, and, owing to the limited admission of air, produce a smoke which contains a large amount of soot. The heat from the combustion is sufficient for keeping up the temperature of the flue. The lampblack thus produced is, however, inferior to that made from peat tar oil. The process of manufacturing the peat lampblack does not differ widely from some of the processes used in treating coal tar, asphaltum, &c., but the invention is interesting, as affording another means of using peat.

HIBERNICUS.

IRELAND'S WEALTH DEVELOPED BY CARBONIZED PEAT CHARCOAL.

SIR,—The importance of this valuable product cannot be too highly appreciated in the smelting and manufacture of iron, to say nothing of its use for culinary and household purposes, railway work, &c. Like many other new things which have turned out of the highest commercial importance—that have at the outset been prejudiced from the want of mechanical and chemical skill, based upon common sense and natural laws—hence peat has by my knowledge been trifled or played with by attempted joint-stock companies, upon small means and no experience, other than tampering with experiments, and coming to no practical or commercial result. There can be no doubt, with proper manipulation in the manufacture of charcoal, that it can be produced at the price of the best charcoal, and not below the ground; and there can be no doubt but carbonized peat charcoal will be produced at the price of coke, from the fact that the ingredients of the peat gas will be extracted therefrom to manufacture the charcoal—that by burning the gas the manufacture from first to last of peat will be all within itself.

The capabilities of peat in its own manufacture into charcoal—with carbonized charcoal—into the smelting and manufacture of iron will create throughout England, Scotland, and Ireland such new phases in commerce as will make Great Britain's manufactures, her mechanics, and artisans very busy for years to come, from the fact that iron is daily superseding timber, stone, brick, and mortar, wherever it can be used, either aloft or on shore. Strange that Ireland in former years was an iron-producing country, so long as her forests of timber lasted, and not strange that that land of richness should again become the first iron-producing country on the face of the globe, from the fact that there is richer ironstone in Ireland than any known quarter of the globe; 70 to 80 per cent. produce, has nothing like it in England or Scotland yet known, but that standard of assay is known already to be in vast quantities in Ireland, and on the surface too.

JOHN CLARK, Junr.,

London, March 15, 1864. Inventor and Patentee of H.M.'s Steam-frigate *Warrior*.

GOLD IN WALES.

SIR,—Your correspondent, "A. B.," called attention in the *Journal* of March 5 to the following remarks of Mr. J. Y. Watson, in his "Review of Mining for 1863."—"In 1862 the market had been inundated with gold mines, and in remarking upon them, in my last Review, I said it would not be very difficult to foretell their ending." Now, although this paragraph may have given great offence in some quarters, and possibly to where least intended; yet at the same time the subject of successful gold mining in Wales has certainly been more seriously injured, and will continue to be injured, by such reports as that from the Welsh Gold Mining Company, written by Mr. J. Nancarrow. In the first place, he says the present reduction works are "designed to deal with 50 tons in 24 hours" (of course, he can at any time say that he never asserted they would do so much; but his report would lead anyone who knows nothing about the matter to infer that it was his opinion they would). Now, it is well known that these works have fallen enormously short of their anticipated powers, and although they were designed to treat 50 tons in 24 hours, they have as yet only treated 10 tons. Of course, every practical man knows that quartz, containing gold, must be crushed, and the gold must be dissolved before it is subjected to any process for the extraction of the gold therefrom; this crushing is most economically performed by stamps, and it is stamps that are used for that purpose at the Welsh Gold Mining Company, and admitting (what I am not at all prepared to do) that they are stamps of the best construction, they would do good duty if they did anything over 1 ton per day per head. A battery of stamps of 40 heads must be of the very best construction to crush 50 tons per day of gold-bearing quartz to the necessary degree of fineness, and a very slight error, either in the designing or in the manufacture of them, would tell very considerably on the amount of duty they would perform. Now, I would ask Mr. Nancarrow if they have anything like 40 heads at the Welsh Gold Mining Company?

Secondly, he says "these works will, doubtless, give you large profits." Now, before making that assertion, did Mr. Nancarrow take the trouble to go and see what the results were at the works in different parts of the county, to enable him to form a reliable opinion? I think not. The same process has been tried not on one, but on several mines in this locality, and the richest—the Vigra and Clogau—has discarded it altogether; although one would think that where quartz is being obtained yielding from 600 ozs. to 700 ozs. per ton, it would have been a great opportunity of proving its capabilities. But, perhaps, as Mr. Nancarrow argues such large profits from the works at the Welsh Gold Mining Company, he can inform us where else they are obtaining large profits from the same process.

Thirdly, Mr. Nancarrow says "at Gofref you have a fine water power;" that reads well in a report; but the present works, situated as they are, cannot make use of it, and to remove them to a suitable spot would cost nearly as much as erecting new ones; but

adopted, and circulated among the shareholders, which he would propose. Mr. PETER WATSON, in relation to the proposition, said they could not but congratulate themselves upon the exceedingly satisfactory position which their property now occupied. That each shareholder was greatly indebted to the unremitting exertions, the judicious economy, and painstaking zeal which had been manifested by their worthy Chairman (Mr. Noakes), and the committee of management, was amply testified by the results achieved. It was a circumstance as singular as it was noteworthy that exactly five years from this very day—March 16, 1859—the committee, in their report, which was doubtless prepared by Mr. Noakes, stated the following:—"The prospects of Wheal Metal continue to improve, and the committee having full confidence in the eventual recovery of the property, propose the immediate erection of a 60-in. cylinder engine. The committee fully expect that when Wheal Metal is worked to a greater depth, and more fully developed, it will prove a source of great profit to the adventurers." It was but due to the committee that such remarks as those he had just quoted should not be forgotten, as they showed that the exertions of the committee had been directed in the interest and welfare of those interested in the property. When some years since he (Mr. Watson) was appointed by the shareholders a member of the committee of investigation, he had ample opportunities of witnessing the exertions of the committee. Notwithstanding the difficulties and vicissitudes which had overtaken the present company in its earlier history, he (Mr. Watson) had never lost confidence in the Wheal Metal portion of the property. As regards the two ends between Trevelyan and Metal shafts, which had been referred to by the Chairman, when on the mine on Thursday last, he (Mr. Watson), ascertained from the manager (Captain Gill), that between those two points there was neither cross-course nor slide in any way disturb the continued value of the lode, therefore, it was but reasonable that the deposit would be found to exist along the whole length of ground which at present formed the space between the two ends, which, of course, would materially enhance the value of the mine. He might mention that at the time Mr. Noakes penned the report from which he had read an extract Great Wheal Vor was making calls, and its market value was £2,000, but at the present time its market value was £20,000. (Hear, hear.)

The resolution was put and carried unanimously. The Chairman said the next resolution he had to submit was one that gave him great satisfaction, inasmuch as it was a substantial confirmation of the prospects the committee had from time to time held out; indeed, it went beyond that, for the committee told the shareholders in September that they thought they would be able from that time to pay quarterly dividends of 5s. per share. They maintained their faith in December, and it was with extreme gratification that upon the present occasion they were in a position to recommend a dividend of 10s. per share. He could assure the shareholders that he should be the last one to recommend such a dividend if the mine were not in a position to induce him to hope that at least that dividend would be for some time sustained. (Hear, hear.) He had all along contended, in which he had been supported by his colleagues, that one of their first principles should be a sound financial one in all commercial undertakings, and particularly in mining. It was prudent to always have a surplus capital in hand, sufficient to meet every contingency. Mr. Watson had alluded to the energy of the committee, and also to the accumulation of reserves in the mine—that their energy and prudence had been successful was patent, and he was sure, and he spoke in the presence of those who know more of the value of mining property than he did, Wheal Metal was doubly enhanced in value by the accumulation of reserves no less than by the sound financial position which the company occupied. He had read with great pleasure some remarks which appeared in last week's Journal, which made a courteous reference to the committee of management, but attributed to the shareholders the prudence of maintaining a reserve balance, with which the mine had been worked. He (the Chairman) hoped the meeting would excuse his egotism when he said he thought the initiative was taken by the committee, although it was but justice to the shareholders to say that they at all times supported the committee in their laudable efforts. He concluded by moving that a dividend of 10s. per share be declared, payable on March 22.

Mr. G. BATTEN seconded the proposition, which was put and carried. Mr. PETER WATSON had much pleasure in proposing the next resolution—that Mr. C. Noakes be re-elected managing director. He had known Mr. Noakes for a number of years—through all the difficulties which had beset the mine, difficulties, perhaps greater than any mine in Cornwall had to contend against. He believed he was but echoing the feelings of his brother shareholders when he said he thought that Mr. Noakes's salary should be increased for the manner in which he had pioneered the enterprise to its present successful position, and but for which they would not to-day have had to declare a dividend of 10s. per share, nor would they possess a mine the reserves of which could not be of less value than £100,000. Mr. BATTEN seconded the proposition; it was put, and carried unanimously.

The Chairman thanked the meeting for this renewed mark of confidence, and stated that it would be his pleasure, as well as his duty, to forward the interests of those with whom he was associated in this undertaking. But he would take this opportunity of saying that he would not arrogate to himself all the merit of this success, for although he had done his utmost, with his coadjutors, for the benefit of the concern, yet it was but an act of simple justice to give merit where it was due. He knew they were all very much indebted to their chief agent, Captain Gill—(hear, hear)—who had worked with the greatest energy, and his judgment and prudence could be best appreciated by him (the Chairman), because he had been most in communication with him. Captain Gill had devoted himself with great assiduity to the promotion of the interests of shareholders, and his judgment was unquestionably exceedingly good. He (the Chairman) did not know a man better qualified for carrying out a mine in an efficient working condition. (Hear, hear.) As far as he (the Chairman) was concerned, he could only again thank the shareholders for their kind appreciation of his services. (Hear, hear.) Mr. RAWKINS proposed the re-appointment of the committee of management. These gentlemen had controlled the company's affairs for a period of 10 years, and had obtained such successful results, which was a sufficient guarantee for their future services. As regards the accounts, he might mention that as the whole of the costs were charged up as closely as possible, the credit balance was an absolutely *bona fide* one, which, he need hardly say, could not be said of every mine the accounts of which showed a credit balance. He moved the re-appointment of the committee of management. Mr. WATSON seconded the proposition. Upon the question being put—that the committee of management be re-elected, and that they be allowed 40 guineas, to be divided among them for their attendance, or in such manner as they may elect, Mr. JOHN DIVETT (a member of the committee), said that some kind shareholders at the last meeting seemed to imagine that the committee was insufficiently remunerated, and proposed that the amount should be increased, which, being seconded, was put and carried. It would, of course, be ungrateful to decline to accept that additional amount, but he thought it necessary to explain the fact that when the remuneration of the committee was reduced from 50 to 20 guineas per quarter, it was for this reason—that the attendances were reduced from weekly to monthly. Now, he contended that there should be some intelligible principle upon which the committee should be remunerated, and with that view he would propose, as an amendment, that each member of the committee be allowed one guinea for each attendance, whereby their remuneration would be fixed upon some intelligible basis.

Mr. HUSBAND (a member of the committee) seconded the amendment. The Chairman said when the old mine was suspended, and operations were commenced upon a smaller mine—Wheal Metal—all were anxious to reduce the expenditure in every possible way, in which direction he was the first to offer that his remuneration should be reduced, and at that time the remuneration of the committee was reduced from 50 to 20 guineas. Mr. Divett seemed to be of opinion that 40 guineas would more than cover the attendances, if one guinea were paid for each, whether the attendance was at the mine or at the office. A SHARPOURMAN, whose amendment would be withdrawn, for now when they had achieved a success, the pinnacle of which had not been reached, was not the time to talk about reducing the remuneration of those who had borne the heat and burden of the day. (Hear, hear.) The Chairman said that Mr. Divett, who was the largest shareholder in the mine, and Mr. HUSBAND were working members of the committee. It was a conscientious principle that had induced Mr. Divett to make the remarks he had done, and, having done so, the question was entirely in the hands of the shareholders. Some discussion ensued, which resulted in Mr. Divett withdrawing his amendment, and proposing in its stead another, to the effect that the remuneration of the committee be 20 guineas, which was seconded by Mr. HUSBAND. The amendment was put, and lost by a considerable majority, when the original resolution was put and carried.

Mr. G. BATTEN mentioned that he visited the mine some days since, when Capt. Gill informed him that two-thirds of their returns were derived by driving the ends and sinking the winzes and shafts, and that the reserves had been increased in value during the past twelve months by something like 70,000. He could not but congratulate the management upon the prudent way in which they had worked the mine.

Mr. PETER WATSON said that under those circumstances the quantity of tin discovered had been four times that which had been taken away. Mr. E. COCKE said it might be satisfactory to the meeting to know that he had a report upon the mine from an accredited agent, which stated that he (the writer) did not hesitate to say that Wheal Metal was not only a rich mine, but that it presented every indication that it would pay permanent dividends to the shareholders.

A resolution was passed that an agent's house should be built on the mine. A cordial vote of thanks to the Chairman was passed, which terminated the proceedings.

EAST CLOGAU GOLD MINING COMPANY.

The second annual general meeting of shareholders was held at the Guildhall Coffee-house, King-street, on Monday, Mr. LYSLEY in the chair.

The notice convening the meeting having been read, the report of the directors was submitted. It stated that since the last ordinary general meeting of the company the directors regret that they have no satisfactory results to lay before the shareholders. The directors have devoted their chief attention to the development of the company's sets, and have hitherto thought it inexpedient to lay out money in expensive machinery for the extraction of gold until the quartz should prove sufficiently rich to be remunerative. They have, however, ordered a water-wheel and two of Britten's pans at a small cost, which would shortly be at work, and will be used to try the quartz from each lode, and should good results follow no time will be lost in erecting suitable machinery on a larger scale. The directors recommend that a call of 1s. per share should be made, payable in two sums of 6d. each. This will suffice to carry on the operations until the end of the year, before which time it is hoped some good results will ensue.

The report of the consulting engineer stated that his doubt as to any successful return being got from the St. Dewi lode is unchanged. The No. 2 level, on St. James' lode, had been driven in nearly under the mouth of the cross-cut level above it, and he had no doubt that 8 or 10 fathoms more will carry it on to the intersection of the two great lodes, which must take place on the brow of the hill, over the cross-cut level. The forebore of St. James' lode, No. 2, is much as usual, but without any specks of visible gold; still he had great hope that if the workings be carried forward to the junction of the lodes—as there will then be not less than 70 fms. of backs—there will be a metallic deposit of some kind found.

The Chairman said he might mention that the directors had hitherto had the resources of the company, and as much as possible had confined the expenditure to the development of the mine. Although during the year no good results had been realized, yet there were found specks of visible gold, just sufficient to make one hope that more would be found. In a short time they would have two of Britten's pans at work, by which they would be able to discover whether they were throwing away valuable stuff without knowing it. The total cost of the pans and water-wheel would not be much, and they would at least enable the directors to know the value of the different lodes. Assays had been made of quartz taken from different parts of the property, some of which did not even contain traces of gold, but others yielded gold at the rate of 300 oz. to the ton. He had not been so sanguine that East Clogau would eventually be successful until the mines began again to produce such astonishing results; but seeing that the character of the quartz was so similar, he saw no reason for supposing that by continuing the operations at East Clogau they would not come upon bunches of as rich quartz as had been found elsewhere, for it could hardly be imagined that Nature had deposited the whole of these bunches of rich quartz only in any one favoured spot. He did not, however, wish to raise very sanguine expectations solely from the success of others. All he wished to convey was that although up to the present time their operations had not been successful, yet they might any day open upon a bunch of rich quartz, which would well repay them for the whole of their outlay, and that the prospects of the mine reasonably

warrant a further expenditure in preference to its abandonment. As regards the letter which appeared in the *Mining Journal*, in which it was stated that the directors had expended 19,000l., his simple answer was that the directors had not had that amount to spend. The directors held a considerable interest in the company, and, therefore, they would do their utmost to promote economy in every department. The directors did not receive any remuneration for their services. He concluded by moving the adoption of the report.—Capt. TREADWELL seconded the proposition. The Chairman said that arrangements had been made whereby the London expenses would be materially reduced.—The report was received and adopted. Thanks to the Chairman and directors terminated the proceedings.

ST. DAY UNITED MINING COMPANY.

A general meeting of shareholders was held on the mine, on March 11, Mr. J. BALSTER in the chair. Mr. E. KING (the secretary) read the notice convening the meeting, and the minutes of the last were read and confirmed.

A statement of accounts for the four months ending with the costs for December was submitted, from which the following is condensed:—

Copper ore sold	£ 419 7 10
Black tin sold	10,938 4 3
Arsenic sold	42 17 8
Sundries	73 1 10 = £10,573 11 7
Mine cost, merchants' bills, &c., Sept.	£ 2,163 17 0
October ditto	2,967 1 4
November ditto	2,941 6 9
December ditto	2,298 12 2
Income tax not allowed	201 19 2 = 9,912 16 5

Leaving credit balance (profit)

£ 1,660 16 2
Balance of assets over liabilities, 2089l. 11s. 8d.

The report of the agents was read, as follows:—

March 9.—It affords us much pleasure in being in a position to submit to you the following report, which contains the prospects as well as the value of our various operations, the object we have in view, and the course we intend to pursue, and our opinions as to the probable results.—Wheal Unity District: In driving the 97 ft. level east of Cornish's cross-course, on Garby's lode, the lode is 5 ft. wide, and producing 4 tons of copper ore per fm.; value from 51. to 201. per fm. I would here mention that we have driven 20 fms. through hard and poor ground, but our motive for pursuing this drive was to extend this lode to the point where the kilas and granite form a junction, as well as to see the junction of Morcom's and Garby's lodes. From what we can judge by their underlie in the 80, we calculate to accomplish this in two months from this time; but this must not be regarded as an opinion, it being impossible to say for certain. There is no question but that we are bordering on the junction of kilas and granite, and that this change has been the cause of the improvement in the lode. We entertain very strong opinions of the objects referred to when accomplished, and look forward ultimately for assistance from this portion of the mine, this lode being in the whole ground below this level, and having produced very large quantities of ore above it.—East Wheal Metal: We are driving two ends in this part of the mine—20 east and west; each end is producing saving work for tin, and presenting good appearances. This part of the property is a considerable distance from any of our operations, and entirely in whole ground. It is our opinion if properly developed it will be found remunerative to the shareholders, and will be proved at a little expense, in consequence of not requiring any outlay for pumping water. We may mention for the guidance of those who are not acquainted with its position, that it is parallel with the Great Consolidated Mines—in fact, in one of the best localities in Cornwall.—Police District—Biscope Pool: In the 155, west of this shaft, the lode is poor, but presenting a little better appearance than it has for some time past. The 140, driving west, and the advance of the 150 ft. level 18 fms., will produce copper and tin ore to the value of 151. per fm.; the lode being 6 ft. wide. We have commenced to sink Harris's shaft below the 130, the lode in which is worth 101. per fathom. Our object in sinking this shaft is not only for ventilation, but to discharge all the stuff breaking in this part of the mine, and the reason that it was not done before was for want of proper winding-power, &c., but which will be soon remedied, the new whim being laid out to command this in addition to Oppie's and Billing's shaft. We have suspended the 90, west of Harris's, on the tin lode, in order to sink a winze from the 80, to communicate with this level: when done it will ventilate this level, and lay open a large piece of tin ground that will pay for taking away. Our object is to drive this level as far as possible, to prove the ground still further west, where there is nothing done below any consequences, and large quantities of tin raised from above. We have commenced to drive a cross-cut at the 104, north of Trevelyan's shaft, to intersect the tin lode; the distance to drive we estimate to be 5 fms. Our object in doing this is to explore the ground as far as possible, there being no level from the 97 to the 114, and by carrying out this plan it will enable us, when intersected, to sink and rise, instead of drawing the stuff 17 fms. The 124, west of Trussell's, on this lode, is at present suspended, but not for its poverty, the end being worth 101. per fm., but from the following reasons—to cross-cut south to cut Trevelyan's copper lode, which is about 5 fms. south of this end; 3 fms. have already been driven. We intend when this lode is intersected, should it offer sufficient inducement, to open it. It was very satisfactory to him (the Chairman) to find that the lode was not so poor as it was reported to be, and that the end referred to, which we shall be enabled to do when we have holed the winze sinking below the 114, which will come down close to this end, so as to well ventilate it. The winze is producing saving work for tin. The 134, west of Trussell's, is also producing a little tin.—Billing's: In the 154, west of this shaft, there has been no lode taken down for some time past, but when last seen was poor. Our object in not driving in the lode is because we can open up ground much faster driving by the side of it, and having before us a very large piece of unexplored ground between this point and Trussell's. We are very anxious to test its value, as from what we can judge from the ground taken away above the 130 we may reasonably look forward to meeting with a good result, and no time is to be lost in proving it. In the 164, west of the shaft, the lode is large, and has been poor, but now worth 101. per fathom. The winze sinking below the 164, and down 8 fms., is worth 141. per fm. The 174 west is worth 101. per fm.; 184 east, 101. per fm.; and the 181 west, 151. per fm. We have communicated two winzes east of this shaft from the 174 to the 184, which has opened up a good piece of tin ground, as well as one winze at the same level, east of Oppie's, and although it has been sunk through a splendid course of tin, we have discovered that it is not on the same part of the lode which we are driving on at the 184 fathom level, although this part is worth 401. per fathom; more of this will be seen in a few days. The 144 fathom level, east of Oppie's, is worth 81. per fathom. We shall resume the driving of the 174 fathom level, east of Oppie's shaft, at once, this being very satisfactory to him (the Chairman) as the communication of the winze referred to from the 174 to the 184. We hope to be in a position to commence the sinking of both Oppie's shaft and Billing's shaft in about a month, during which time we shall have communicated the 184 from Billing's with the same level at Oppie's. The distance between the shaft is about 33 fms. The 184, west of Oppie's, is worth 121. per fathom. The summen at Oppie's are now engaged cutting trip-plate, and doing all the necessary work preparatory to sinking this shaft, which is now down 2 fms. below the 184, and worth 501. per fathom. Billing's shaft is worth 201. per fathom. From this report you will observe we are opening up a pretty good mine, and we have no hesitation in saying that, if the mine is driven in a proper manner, also erecting efficient machinery for the necessary requirements on a large scale, which must be done to make it a lasting and good property. Our reports have been very strong as to the ultimate success of the mine, but not in any way more than have been, and will be, confirmed by the sales of tin and copper. We have employed in these mines 328 men, 187 boys, and 70 girls; total, 585. Our tribute pitches are much the same as for some time past, and with the present price of tin our profits for the next four months will exceed the past four months, by including all new buildings and other new work, excepting the engine and new boiler for steam-stamps.—FRANCIS PRYOR (Manager), ELISHA RALPH, JOSEPH COCK, C. OATES, J. GILBERT.

The Chairman had much pleasure in meeting his co-adventurers upon the present occasion. He might mention that he made it a point to examine the whole of the books, and, therefore, he could vouch for their accuracy—indeed, he might truthfully say no public company had accounts better kept. It was very satisfactory to him (the Chairman) to find that the accounts showed a balance to the credit of 2089l. At a former meeting it was determined—and he thought wisely so—to bring up the costs as closely as possible, instead of declaring a dividend. Upon that occasion they had written off one month's costs, so that they were now fairly in a position to divide a portion of the realized profits. The committee had thoroughly gone into that matter, and were unanimously of opinion that the prudent course upon the present occasion was to divide not more than 1000l., which would give a dividend of 5s. per share upon the 4000 shares into which the mine was divided. The present position was good, the reserves were increasing, and he had every reason to believe they had in St. Day a good and lasting property.

Capt. FAYOZ (the manager) was pleased to be in a position to submit such a satisfactory report. As shown by the accounts, the past four months' operations had resulted in an actual profit of 1800l., after paying for the whole of the extra work. As regards the mine, they had had an important improvement in the Wheal Unity district. For some time they had been driving the 97, east of Cornish's, on Garby's lode, which had hitherto been unproductive; but in the last 2 or 3 fms. indications had been presented that the end was passing from the granite into the kilas. Although in the report the end was valued at 4 tons per fathom, he was glad to be able to inform the meeting—for he had been underground that morning—that he could fairly estimate the present value of the end at 6 tons of good copper ore per fathom. At the junction of the kilas and granite a course of ore was being discovered, the importance of which could not be over-estimated, from the fact that the 97 was the lowest point of operation at this mine, but could easily be worked at deeper levels from Singer's shaft. In the Police District, the sinking of Oppie's and Billing's shafts would be resumed in about a month from the present time. From the section it would be seen that from the 174 to the 184 the ground had been cut out by winzes. In this part of the mine they had been laying open good reserves, beyond which the winze east of Oppie's had been sunk through a splendid course of tin just discovered, and was not on the same lode as that being driven upon in the 184 fms. level. All he could say was that at no previous period had St. Day presented such indications of becoming a permanently profitable mine. The machinery now in course of erection would enable them to work the mine more efficiently, and with greater economy; and he thought they were in a position for paying regular dividends, besides paying for the extra machinery now being erected.

The report was ordered to be entered on the minutes, and the accounts were passed and allowed. A resolution was passed declaring a dividend of 5s. per share upon the 4000 shares into which the mine is divided.

Mr. W. WILLIAMS considered in a mine like St. Day, in which a large interest was held in the country, a general meeting should be occasionally held on the mine.

After some discussion, a resolution was passed to the effect that each alternate meeting should be held on the mine. Mr. WHITFORD proposed that Mr. J. S. Bickford (of Camborne) should be elected a member of the committee. A resolution was passed, re-electing the past committee, and appointing Mr. Bickford a member.—Some discussion ensued with reference to the appointment of doctors to the mine, during which Capt. F. Pryor expressed his opinion that in a mine of the magnitude of St. Day, where something like 600 persons were employed, it was important that at least one of the doctors should reside at Chacewater. It was eventually agreed that Mr. Hitchens (of Redruth), Mr. E. W. Mitchell (of St. Day), Mr. G. W. A. Mitchell (of Redruth), and Mr. Hugo (of Chacewater) should be the doctors to the mine.—The proceedings terminated with a vote of thanks to the Chairman and the officers of the company, for their attention to the interests of the mines.

SINGAPORE GAS COMPANY.—The directors have received advices from their manager to Jan. 22. The manager reported that the *Early Dawn* arrived safely on Dec. 22, with the remaining portion of the apparatus. On Christmas Eve the works were lighted up, and have ever since formed a great attraction to the natives. No doubt is entertained that the gas will be generally used, the natives being well satisfied that there is nothing in the manufacture of gas against their religion, and that they can all use it. The manager has tested Labuan coal, and finds it to yield 9-100 cubic ft. of gas per ton, of the illuminating power of fifteen sperm candles. The gas is very clear of sulphur, and the light very clear and bright, but the coke is of no use.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

The extensive smelting-works at Bagillt, on the Dee (formerly Mather's), have recently been purchased by Messrs. Alfred Courage and Co. by Mr. Readwin, who has joined six or seven gentlemen of means to carry on the business of the works with a subscribed capital of 30,000l., under the Limited Liability Act. The principal object of the company is the manufacture of spelter by Bennett's patent, which they have also purchased. Mr. Readwin knows as well as anybody the occasional value of Welsh blende ores, and he is probably calculating upon utilizing these ores after the gold extractors have done with them; a market for which can be of no disadvantage to the proprietors of mines in the Dolgelly district.

DYFEGWY MINES.—The lode has been cut in the 82 ft. level cross-cut, and found rich: it is worth to-day (the 17th inst.) 251. per fathom for lead ore.

WHEAL ROSE (Scorrier) is making a considerable stir in Cornwall, in consequence of the extraordinary manner in which it has been brought into a profitable state of working, and at the amount of reserves accumulated. The prospects throughout are first-rate. In the 80 ft. level cross-cut they are in daily expectation of cutting the lode, as a large volume of water is gushing from the end. The next parcel of ore for sale is 300 tons; and should the lode be cut as good as is anticipated, the return will be very greatly increased, and the next sampling be over 400 tons. At the next meeting a large amount of profit will be shown. This is one of the finest properties in Cornwall, and its successful development must prove highly beneficial to the district, and more especially so to the adjoining sett of Great North Downs, as the most productive lode in Wheal Rose passes through this sett, and it is to be hoped that the adventurers in Great North Downs will shortly meet with results as satisfactory as their fortunate neighbours.

BOSCAWELL.—The 50, 60, and 78 ft. levels, on Rowe's lode, continue to hold out excellent prospects. All dispatch is being used to reach the same tin ground by a 90 ft. level from Brown's slide shaft.

BRONFLOYD UNITED.—Capt. Matthew Francis and Mr. J. H. Hitchens have inspected and reported favourably upon the mines of this company. Capt. Francis estimates that there is 50,000l. worth of ore above the point already drained by the machinery. Mr. Hitchens considers it will prove one of the most valuable industrial resources of the district.

BOSCAWELL.—The 140 and 150 ft. levels continue very productive for tin. In the 100, west of Trevelyan's, the lode still has a most kindly appearance, and is yielding rich stones of yellow copper ore, worth 201. per fathom. At the 90 there is every appearance of the same run of ore ground coming into the end. These levels are extending into a very extensive run of the sett westward, hitherto wholly unexplored.

EAST WHEAL FORTUNE (Sithney).—The operations in this mine are progressing most satisfactorily. The deep adit is fast advancing towards the great junction or conglomeration of lodes in the centre of the sett, where it is the prevailing opinion amongst miners that an immense deposit of tin will be found. The adit end is now within a few fathoms of a large, well-defined south lode, underlying north, while in its course eastward will intersect five other lodes and branches, and there also good results are looked for. From the rich tin district in which this sett is situated—being between the profitable mines of Wendron on the east, and the celebrated Wheal Metal on the west, which is now undoubtedly the richest tin mine in Europe, and a commanding position of nearly a quarter of a million sterling—the development of East Wheal Fortune is watched with considerable interest; and from the number of lodes it contains, with so many intersections, and the extraordinary extent of old tinners' workings at surface, there are few mining adventures that present such indubitable elements of great mineral wealth.—March 15.

WHEAL ROSE.—The water which is flowing in large streams from the forebore of the 80 ft. level cross-cut is of a very high temperature, and nearly equal to that of the United Mines previous to their cutting the "Hot Lode," which produced from 20 to 30 tons of ore per fathom, and laid open upwards of half a million sterling in copper ore, a continuance of which is now being worked in the Clifford Amalgamated Mines, from whence their present profits are being derived. Such a circumstance as the flow of hot water from a lode has never yet been known to fall in discovery of an immense body of ore. This assures well for Wheal Rose, and it anticipates that the ore cut here in the next fortnight that will astonish the lookers on; and those who are anxious to purchase shares will not be able to get them for less than double their present price: 300 tons are sampled for sale on Thursday next, which will leave a very handsome profit. This quantity will be doubled, and even trebled, before the year is out.

GOLD IN WALES.—Very rich gold quartz has been found in four different places at Gwynfynydd (the mine adjoining Cwmelshen). Two of the lodes are about 2 ft. wide, and one nearly 35 ft. Immense quantities of quartz can be raised here at a small cost, and shot down an incline to the crushing-mill, which it is proposed to erect at a spot on the sett which commands all the water from Pletly-y-Cwm and the Rhado Mawddach waterfalls, one of which is 120 ft. high, and the other 80 ft. Some of the auriferous minerals are identical with that at the Welsh Gold, and is just as rich. The proprietors intend to form this into a company at once; and now that the Hymenian plan of amalgamation at Clogau has succeeded in extracting more than 8 dwts. of gold per ton of the poorest quartz from St. David's lode, at a cost most certainly reduced to a minimum, it is clear that, at other places in the district, where, say, 50 tons of quartz a day can be operated upon, remunerative results may be confidently anticipated. The continuous yield of gold from the rich quartz at Clogau is, to say the least of it, remarkable; but the fact of 36 ozs. having been obtained from 92 tons of quartz which would have been valueless but for the system of amalgamation adopted, is a fact of far greater importance to the general interests of the district, as it has brought the extraction of gold to a mechanical issue, as regards poor quartz, where it has been the main object of the proprietors to form this into a company at once; and now that the Hymenian plan of amalgamation at Clogau has succeeded in extracting more than 8 dwts. of gold per ton of the poorest quartz from St. David's lode, at a cost most certainly reduced to a minimum, it is clear that, at other places in the district, where, say, 50 tons of quartz a day can be operated upon, remunerative results may be confidently anticipated. 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BRITISH MINES.

YARNEE.—R. Barkell, March 16: There is no material change in any of the bargains since last reported on. The 60 west, on south lode, is very wet, and the end is producing good grey work; we have not yet reached the south part of the lode. Our progress in sinking the winze below the 40, west of the shaft, is pretty good, the lod

therein is not quite so good, but still well defined, and carrying a good south wall. The slope in the back of the same level is worth 3 tons per fathom, and the pitch in the back of the 30, east of the shaft, 2½ tons per fathom. The lode in the shaft, sinking below the 30 fm. level, on the north lode, maintains its size (4 ft.); it is well defined, and producing a little copper ore.

YUDANAMUTANA MINING COMPANY.—The enquiries for the report of the meeting of this company having exceeded our usual publication, we have reprinted it in a Supplemental Sheet, which is given with this week's Journal. It will be therein seen, as mentioned in our last Journal, that the total available assets amounted to 70,940l., against 9683l. 15s. 4d. liabilities. The Chairman stated that the excess of assets over liabilities was 559,681l., which, after deducting the whole of the capital stock—135,000l.—showed a profit of 24,681l., equal to a dividend of 11s. per share, in addition to the 6s. per share already paid, after deducting all expenses, and the large outlay made in the development of the mines. Mr. Farn having enquired why the directors had not accepted the offer of 90,000l. for the Blinman Mine, the Chairman replied that the offer was *bona fide*, and still open; but that, as it emanated from parties who had ample means of ascertaining the intrinsic value of the property, and the directors having had reason to suppose that such an offer would not have come from such a quarter unless the actual value of the mine were considerably larger than the sum offered, had not accepted it. It will be seen that our own correspondent at Adelaide, whose letter appears in another column, speaks in the highest terms of the Yudanamutana Mines, and as pre-eminent in the north of the colony, and every communication from reliable informants furnishes further evidence of the great value of these mineral sections, if further information were required, but we consider that the results of produce have already established the fact.

BRITISH COPPER COMPANY.—There has been a great demand for the shares in this company, several thousands having been applied for this week. A report has been received from Rednal that the lode has increased from 6 to 21 ft. in width. The shares are now quoted ¼ to ½ premium. It is justly observed that we ought not to send our capital to other countries to work metals when we have so many valuable mines lying idle at home, and when our vast and increasing population call loudly for more sources of employment. In these circumstances the establishment of a general company for British mining, with a capital competent to deal with a variety of mines in different districts of the country, is regarded with favour. The mines already taken up by the new company are situated in Shropshire and Argyshire, and the directors are on terms for mines in other districts. We observe that Mr. Alexander Alison, late of Glasgow, has been appointed Chairman of the board, who, from his varied experience in mining, is well qualified to fill the office, and speaks well for the good management of the company, and its entire success as a commercial undertaking. It cannot be doubted that mines are the most legitimate enterprise in which the capital of a nation can be embarked, and since in proportion to the interest taken in mining so is the national income increased, it is hoped that with the establishment of the British Copper Company a new era in mining will be inaugurated. It is complained that the working of copper and lead mines has hitherto been confined almost exclusively to Cornwall and Wales, while the Midland and Northern Counties remain almost untouched. But this is not all, for Scotland, which embraces such a vast area of metallic rock, remains a dead letter, and Ireland, which abounds in metals, is in scarcely a better position. Under these circumstances, every confidence is felt that the company will find an ample field for the profitable employment of its capital.

EAST ROSEWARNE.—This mine has considerably improved in the lower levels, and from the fine runs of ore the ends are now passing through, the months samplings must increase, and give considerable profits. In the 75 west, under the elvan course, the lode is valued at from 20l. to 25l. per fathom; and from the character of the lode and killas, I should think a continuous run of ore will be laid open; in the back of this level the lode is valued at from 10l. to 15l. per fm. In the 65 west, and over the elvan, the end is in a fine course of copper ore, valued at from 40l. to 50l. per fathom; the end can be driven on this splendid course of ore 5 or 6 fathoms per month; from the run of ore in the 55 the agent expects this to continue for the next 30 fathoms in length. King's shaft, sinking below the 55, is worth 10l. per fm., and in a few fathoms will be in the rich run of ore now in the 65 west. A winze is sinking, 15 fathoms east of King's shaft, on a lode worth 20l. per fm., and will come down on a lode worth 45l. per fm. At the last meeting a balance of profit, amounting to 450l., was carried over, and at the next meeting a dividend will be declared, yet the shares can be bought under 70s. per share, clearly proving the mine has not yet received public attention. Investors should examine the sales of copper on March 10—130 tons produced 1045l., and the next sampling will exceed that amount by 800l.

MINING IN IRELAND.—The barony of Burren, county Clare, has long been known as a rich mineral district, for more than 80 years since the Crimlin copper mine was worked there, and it is reported that the late Captain Bagot (who established the Kapunda Mines, in South Australia) was very successful there previous to leaving Ireland, in about 1836. The mines known at the present time in the barony are—the Burren lead and calamine mine, formerly known as the Ayle-bee, or Yellow Hill; here Captain Bagot succeeded very well; and the CAPPAUGH, the property of Mr. Williamson, where success would, in all probability, have been achieved by Mr. Collett had not litigation stopped the mine, in 1859. This mine was very favourably reported upon by Messrs. Henry Thomas and Von Uster. In the glen about three miles from the town and seaport of Ballynagh, on the lands of Greogan's Castle, three lodes were discovered a few years since, one of which presents most favourable appearances. This property was reported upon in the *Mining Journal* of Jan. 31, 1863, by Capt. Tom and Floyd, and the nodules and boulders of iron service well worthy of attention. There are also two chalybeate springs, and the peat is of superior quality, lying over the coal measures. Now that carbonised peat charcoal (as noticed in the *Mining Journal* of Saturday last) is likely to be used in the smelting of iron, it would be well if those parties interested would direct their attention to the barony of Burren, which is very favourably circumstanced for mineral, and close to the seaport of Ballynagh, on Galway Bay.

MINING IN ITALY.—TESTIMONIAL TO A MINE MANAGER.—For some time past considerable attention has been directed to the metalliferous mines of Dome d'Ossola, and the mountains in the immediate vicinity of the Lago Maggiore, several of which are at present being worked by English companies with favourable results—the Victor Emmanuel Copper Mines and the Valanzasca Gold Mines being amongst the number. The management of the properties of both of these companies has, from the time of their commencement, been in the hands of Dr. E. Francfort, who has given great satisfaction to the shareholders through the energy he has displayed, and the care which he has shown in watching the interests of his employers; and at their last meeting the Victor Emmanuel Company decided to express their appreciation of his services in a manner somewhat more substantial than would be implied by the usual complimentary vote of thanks, and to present him with a testimonial in the shape of a handsome service of plate. It will be unnecessary to say more with regard to the excellent taste and workmanship of the several articles than that they have been manufactured by Mr. Edward Whistler, the well-known silversmith of the Strand—the directors in their selection having evidently chosen a design which is in every way calculated to afford Dr. Francfort the highest gratification. The testimonial consists of a tea and coffee service and salver, of the aggregate value of 120l., and, although elaborately wrought and very substantial, could scarcely be surpassed for elegance and neatness. The several pieces of the service bear the crest of Dr. Francfort—"a strong tower," enclosed within a garter, upon which is engraved the motto "Frane et Forti," whilst upon the salver the reason and occasion of the testimonial is thus explained:—"Presented by the shareholders of the Victor Emmanuel Mining Company (Limited), in accordance with a resolution unanimously passed at their annual meeting, on the 18th of February, 1864, to the Chevalier Eugene Francfort, F.G.S., &c., &c., for his mining engineering and management—in testimony of their high esteem, and in acknowledgement of his faithful attention to their interests." It cannot be doubted that the testimonial is one which will reflect great credit alike upon the donors, the recipient, and the manufacturer.

GEOLOGICAL SOCIETY OF LONDON.—March 9: Mr. W. J. Hamilton, President, in the chair.—William Eassie, High Orchard House, Gloucester; Francis Abiet Jesse, F.L.S., Lianber Hall, Ruthin; and Henry Lucas, Hyde-park-gardens, were elected Fellows. The following communications were read:—
1. "On the Discovery of the Scales of *Pteraspis*, with some remarks on the Cephalic Shield of that Fish," by E. Ray Lankester; communicated by Prof. T. H. Huxley.
2. "On some remains of *Bohrichia* from the Upper Devonian Sandstones of Elgin," by George E. Roberts; communicated by Prof. J. Morris, F.G.S.
3. "On Missing Sedimentary Formations from Suspension or Removal of Deposits—their general relations and importance," by J. J. Bigsby, M.D., F.G.S.
The following specimens were exhibited:—Minerals from New South Wales, presented by Sir Daniel Cooper, Bart. Silurian Fossils from Ottawa, Canada, exhibited by Dr. J. A. Grant. Graptolites from the Skiddaw Slate, exhibited by J. Bolton, Esq.
On Wednesday the following papers will be read:—1. "On some new Fossils from the Lingula-flags of Wales," by J. W. Salter, F.G.S., A.L.S.—2. "On the Millstone-grit of North Staffordshire, and the adjoining parts of Derbyshire, Cheshire, and Lancashire," by E. Hall, B.A., F.G.S., and A. H. Green, M.A., F.G.S.

THE OLDHAM GEOLOGICAL SOCIETY.—At the monthly meeting of this society (Mr. D. Jack in the chair), the business of the evening was the reading, by one of the members, of a copy of the paper lately read before the Manchester Geological Society, by Mr. Joseph Dickinson, F.G.S., on "Modern and Scriptural Geology." Little discussion took place, as it was understood that one of the members had taken upon himself the task of preparing a paper in answer to Mr. Dickinson's opinions and theories. His reply will be read at the next meeting of this society.

INTERESTING TO INVENTORS.—The French Society for the Protection of Animals, taking into consideration the cruelty to which horses are exposed when drawing heavy loads of clay from ground excavated for building in various quarters of Paris, have offered a premium of 500fr. to the inventor of a machine, to be set in motion by steam or other motive-power, of which the application shall have been successfully made in any of the building yards of Paris.

The illustrious chemist Liebig has just expressed, on the subject of the oldium in vines and the potato disease, an opinion which is worthy of mention. The cause, he says, is not in the atmosphere, as many people suppose, but in a want of vigor and an exhaustion of the soil, which defect may be remedied by the use of bone powder and salve.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, MARCH 18, 1864.

COPPER.		SILVER.	
Best selected.....	106 0 0	Sheets.....	104 10 10 1/2
Tough cake.....	103 0 0	Wire.....	94 10 10 1/2
File.....	103 0 0	Tubes.....	104 10 10 1/2
Burra Burra.....	107 0 0	FOREIGN STEEL.	
Copper wire.....	0 1 1	Swedish, in kegs (rolled) 15 10 0	Per Ton.
ditto tubes.....	0 1 1 1/2	ditto (hammered) 16 0 0-18 0 0	
Sheathing & bolts p. ton 110 0 0		ditto in fagots.....	17 0 0-18 0 0
Bottoms.....	115 0 0	English, Spring.....	18 0 0-23 0 0
Old (Exchange).....	95 0 0	Bessemer's, Engineers Tool 44 0 0	
		Spindle.....	20 0 0
		QUICKSILVER.....	7 0 0 p. bottle
IRON.		SPALTER.	
Bars Welsh, in London.....	8 15 0-9 0 0	Foreign.....	22 0 0-22 10 0
ditto, to arrive.....	9 0 0	To arrive.....	22 10 0
Nail rods.....	9 10 0-10 0 0		
Stafford, in London.....	11 0 0-11 10 0	SING.	
Bars ditto.....	11 0 0-11 10 0	In sheets.....	26 10 0-27 0 0
Hoops ditto.....	12 0 0-12 10 0		
Sheets, single.....	13 0 0-13 10 0	TIN.	
Pig No. 1, in Wales.....	4 10 0	English, blocks.....	112 0 0
Refined metal, ditto.....	4 0 0-5 0 0	ditto, Bars (in barrels).....	118 0 0
Bars, common, ditto.....	7 15 0-8 5 0	ditto, Refined.....	117 0 0
Do, merch., Tyne or Tees.....	8 10 0-9 0 0	Banca.....	114 0 0
ditto, railway, in Wales.....	7 15 0-8 0 0	Straits.....	112 0 0-113 0 0
ditto, Swed., in London.....	12 10 0-13 0 0		
To arrive.....	13 0 0	TIN-PLATE.	
Pig No. 1, in Clyde.....	2 17 0-3 3 0	IC Charcoal, lat. qu. p. bx. 1 11 0-1 13 0	
ditto, f.o.b. Tyne or Tees.....	2 16 0-2 18 0	IX Ditto 1st quality.....	1 17 0-1 19 0
ditto, f.o.b. ditto.....	2 15 0	IC Ditto 2d quality.....	1 9 0-1 10 6
Railway chairs.....	5 10 0-5 15 0	IX Ditto 2d quality.....	1 15 0-1 16 6
" spikes.....	11 0 0-12 0 0	IC Coke.....	1 6 0-1 7 6
		IX Ditto.....	1 12 0-1 13 6
		Canada plates.....	14 0 0
		In London; 20s. less at the works.	
		Yellow Metal Sheathing p. lb. 9 1/2 d.	
		Sheets.....	p. lb. 9 1/2 d.
		Indian Charcoal Pigs.....	7 0 0-7 10 0
		In London.....	
		* At the works, 1s. to 1s. 6d. per box less.	

REMARKS.—We regret that we are not yet enabled to report a more satisfactory state of the Metal Market; the condition of dullness and inactivity which has characterised it for some time still continues, and until we see something more definite in political affairs we almost fear the present state of things will remain unaltered, though we have some hope that as the spring advances a favourable turn may take place, and greater activity arise. The advices from Calcutta are of a somewhat mixed character, for although money is easier, and exchanges lower, yet the market does not show much greater animation, and the general state of trade is anything but healthy. From Bombay, however, the intelligence is of a more decidedly favourable character, and we trust that throughout India commercial affairs may, ere long, resume their wonted conditions of prosperity, and the shipments of metals to that important portion of the empire again become as large as formerly.

COPPER.—The decline announced last week has failed in producing more activity in the market, and transactions continue very small. The standard of ores has fallen between 6l. and 7l., which has had the effect of making the metal still quieter. In Chili, sales have been effected of about 1500 tons, lying in Liverpool and Swansea, at prices varying from 90l. to 92l., and for arrival 500 tons have sold at 92l., all for French account. There are still buyers at 92l. per ton.

IRON.—The orders for America continue to be good, and for the East Indies the demand is also increasing; but home orders are still held back, in the hope of a reduction in price; and, under all circumstances, it does not seem very improbable that a reduction may take place ere long. Swedish iron still remains in good demand, and present prices are decidedly firm. The Scotch pig-iron market has taken a more favourable turn during the week, in consequence of some operators having been induced, by the increasing disposition to interpret policies favourably, to cover "bear" accounts, and others to go into stock. An improvement of about 2s. 6d. per ton has taken place from the lowest point, and transactions have taken place at 58s. 4 1/2 d. cash, 58s. 9d. one month, and 59s. 6d. three months. The following day even higher prices were reached, and sales were effected at 58s. 9d. cash, 59s. 3d. one month, and 60s. 3d. three months. These sudden rises, however, brought sellers into the market, and buyers gradually withdrawing, prices somewhat declined again, and the last advices from Glasgow state prices to be 58s. 3d. to 58s. cash, 58s. 7 1/2 d. to 58s. 6d. one month, closing buyers at 58s. cash, and sellers at 58s. 1 1/2 d. cash.

LEAD.—Although the demand for this metal is not very large, yet from the scarcity of the supply, the market continues firm at 21l. 12s. 6d. to 21s. 15s. for common English pig, 22l. for LB, and 22l. 10s. for WB.

TIN.—On the 17th instant the smelters of English announced a fall of 4l. per ton, making present prices 112l. for blocks; 113l. for bars; and 117l. for refined; as this decline had previously been anticipated in actual sales, it will not have much effect upon the market. The prices of foreign remain unaltered, and further business has been done in Straits at 112l. cash. The price of Banca in Holland has declined to 69 fls., at which 2000 slabs changed hands.

SPALTER.—The market is somewhat firmer, and 100 tons on the spot have been sold at 22l. 5s., and 50 tons in Hull at 21l. 12s. 6d.; the price for forward delivery still remains at 22l.

STEEL.—No alteration of any kind has taken place in this metal, which has hardly ever been known to remain in so dull a condition.

TIN-PLATES.—A fair business doing at former quotations. QUICKSILVER still remains without alteration.

NEW YORK, MARCH 2.—The demand for domestic coal is good, and prices are quite firm; the receipts are liberal, but the consumption is large; the stock here moderate; sales from yard at 87 to 89 1/2 per ton. Foreign is in limited supply and in good demand, especially steam coals. Refined iron copper has been in good request at 42c. for Quincy and Detroit; 41 1/2 c. for Forge Lake, and 40c. for Baltimore, cash. New sheathing, bolts, and braziers' copper are steady at 50c., and yellow metal at 36c.

BOSTON, MARCH 2.—In English Cannel coal there have been small sales at 15s. to 17 1/2 per ton, cash. Sydney and Picton are steady at 85 to 88 1/2 per ton. Anthracite is selling in retail lots at 11l. to 12 1/2 per ton. The stock of Scotch pig-iron is very much reduced, and the market is steady and firm. The sales have been at 25 to 52 1/2 per ton for Scotch, Garabherrie, and other brands, No. 1; and the American pig at 50 per ton. Bar iron is firm, and continues to be sold in lots as wanted at full prices. In Russian sheet nothing further has been done, prices are nominally the same.

The settlement of the fortnightly account on the MINING MARKET took place on Wednesday, and was again particularly heavy, and, with the exception of a scarcity of shares in one or two mines for delivery, passed off well; and a very active business has already commenced for the next settlement in a number of mines, both for investment and speculation. Copper continues dull, and tin has again fallen, but we hope before long to have to notice a reaction in both. Great Wheal Vor shares have been very largely dealt in, and in demand up to 42l., and leave off 39 1/2 to 40 1/2, ex-dividend of 10s. per share. In former times Great Wheal Vor was the most extensive mine in Cornwall, and produced ores to the value of upwards of 1,000,000l. sterling; and now, as the Wheal Metal, or parallel lode, it bids fair to become again the richest mine in the county. Not many months ago the shares were at 5l. each, or 30,000l. for the mine; and it has now reached a market value of 250,000l. As a matter of course, also, the ground about it has risen in value accordingly; and the sett immediately adjoining west has been taken up, under the name of West Wheal Metal; a large capital subscribed to work it, and the shares are 4 to 4 1/2, buyers. In this sett, formerly a part of Wheal Vor, the Metal lode has, we are informed, been intersected 3 to 4 feet wide, and upon the erection of an engine tin can be returned at once. The capital in hand is considered sufficient to render any further calls upon the shareholders unnecessary. On the other side of Great Wheal Vor, and adjoining it to the east, the mine formerly worked by that company under the name of Sithney Wheal Buller, has been in demand under the name of Sithney Wheal Metal, at 5 1/2 to 6. Sithney Carnmeal shares are also in great demand, at 6 1/2 to 7; Calvadnag, 7 1/2 to 8; Cargoll, 38 to 40; Great Wheal Fortune, after receding to 14 on Thursday, rose on Friday to 16 1/2, 17 1/2.

West Seton shares have been in great demand, and advanced to 21s. 25s.; the lode in the 110 west is worth 100l. per fm. The 110 west, on new north lode, is worth 3 tons of ore per fm.; east, 5 tons per fm. Clifford Amalgamated, 34 1/2 to 35 1/2; Copper Hill, 12 to 14; Drake Walls, 38s. to 39s.; East Basset, 64 to 66; East Caradon, 29 1/2 to 30. East Lovell shares, after being very flat, at 6 to 6 1/2, rose suddenly before the account day, and leave off 10 1/2; the lode at the shaft is worth 100l. per fm. St. Day United, 9 to 9 1/2 per 4000th, into which number the mine will now be divided; at the meeting the accounts showed a profit on four months of

1660l. 15s. 2d., and a dividend of 5s. per share (1000l.) was declared, leaving a balance in hand of 1089l. 11s. 8d. It will be observed that the profit was sufficient to give 7s. 6d. per share; but it was thought best to add to the balance in hand, and so render more certain an increase of dividends in the future. The report presented to the meeting was of a very satisfactory character, and the mine promises to become a good and steady dividend-paying property. Opie's shaft is down 2 fms. below the 184 fm. level, worth 50l. per fm. Billing's shaft is worth 20l. per fm. With the present price of tin the profits for the next four months will exceed that of the past four months. Wheal Harriet, 35s. to 36s.; the 115 end continues to produce good stones of ore. The east stope is worth 30l. per fathom; west, 20l. per fathom. Great Wheal Busy shares have risen to 5 1/2; the lode in the 130 end east is now a fine course of ore, worth 50l. per fathom. North Roskear, 25 to 26; at the meeting the accounts showed a balance of 1762l. 3s. 10d., and a call of 1l. per share was made. The extra costs on account of new steam-stamps, &c., charged in the accounts were 1200l. The stamps are expected to be at work in about two months, when the accumulation of the tinstuff to stamp will be about equal to 15 tons of tin. East Russell, 3 1/2 to 3 3/4; Gonamena, 4 1/2 to 4 3/4; Hington Down, 4 1/2 to 4 3/4; Marke Valley, 6 1/2 to 6 3/4; Nangiles, 31 1/2 to 32 1/2, and improved demand. Wheal Grenville shares have been largely dealt in, and advanced to 7 1/2. East Grenville shares also firmer, at 2 1/2 to 3 1/2. Wheal Crebor shares, owing to a telegram received after business hours on Saturday, announcing a falling off in the 84 east, receded suddenly from 48s. 6d. to 44s., and leave off 42s. to 44s. North Crofty, 4 1/2 to 5; North Downs, 35s. to 37s. 6d.; North Shepherds, 5 1/2 to 5 3/4; North Treskerby, 3 to 3 1/2. Stray Park shares have been as high as 36, and leave off 34 1/2 to 35 1/2. Prince of Wales, 4s. to 6s.; in the adit cross-cut, towards the Drake Walls tin lode, a branch has been cut 10 in. wide, carrying a little tin; this branch is underlying towards the main lode, which, if cut good, will cause a great demand for these shares, which are now at a mere nominal price.

Pendern, 5 1/2 to 6; Prosper United, 6 1/2 to 6 3/4; Providence Mines, 4 1/2 to 4 3/4; South Caradon, 450 to 460; South Caradon Wheal Hooper, 10s. to 12s.; South Condarrow shares have advanced to 27s. 6d., 32s. 6d.; South Tolgus, 40 to 42; Tincroft, 19 to 19 1/2, ex-dividend of 10s. per share; West Caradon, 20 to 22; West Chiverton, 82 to 84; Wheal Buller, 30 to 33, a call of 3l. per share paid; Wheal Basset, 87 1/2 to 92 1/2; Wheal Basset and Grylls, 16 1/2 to 17 1/2; Wheal Chiverton, 12 1/2 to 13 1/2; Wheal Ludeon, 3 to 3 1/2; Wheal Margaret, 18 to 19; Wheal Mary Ann, 13 1/2 to 14; Wheal Seton, 190 to 195; Wheal Trelawny, 23 to 24. Wheal Treloweth, 2 1/2 to 3; the mine is looking better; the 144, west of sump-winze, is worth 27l. per fm. East Rosewarne, 2 1/2 to 2 3/4; an important improvement has taken place in the 65 east; the lode is worth 45l. per fm.; the 75 west, 21l. per fathom; the 65 east, 10l. per fathom; the lode in King's shaft, 10l. per fathom; the new winze, east of King's shaft, 20l. per fathom; the 130 tons of ore bringing 1045l. Gawton Copper, 15s. to 17s. 6d.; the lode in the 36 is worth 6 to 8 tons per fm. The ore sold for the month realised 295l., and left a profit of 50l. Great Retallack shares are in demand, at 5s. to 6s., but no sellers at these prices. The lode lately cut looks promising. The great number of applications made for shares in a company called the "New Devon Consols," upon the supposition that it was connected with the Devon Great Consols Company, has induced the directors of the latter to address to us a communication, which will be found in another column. They request us to state that they know nothing of the company or of the mine, which is said to "adjoin Devon Great Consols to the north, and having the same great cross-courses running through it which had such extraordinary influence in producing the ores in Devon Great Consols." The great cross-course against which the ores made in Devon Consols, Maria lode, passes north through West Maria and Fortescue; and also through the corner of a sett (the only one in Lamerton parish adjoining Devon Great Consols, and, therefore, we presume that referred to under the name of "New Devon Consols"), which, under the name of "Devon Consols North," was brought out in 1851, and 10,000l. premium charged to the public, on the faith of this same great cross-course. On referring to the *Mining Journal* for 1851, our readers will find the prospectus in detail; and it would appear that the mine was worked for three years under the management of Mr. Jehu Hitchins, and without success, for in 1854 the machinery was advertised in the *Journal* for sale. In the prospectus of the "Devon Consols North," of 1851, the directors plainly intimated the premium they intended to charge a confiding public; but in that now issued by the directors of "New Devon Consols," no mention is made of the sum to be paid as premium to the promoters, and it is an omission the shareholders should at least enquire into.

The Vigna and Clogau Mining Company have received this week 173 ozs. 7 dwts. and 2 grs. of gold, being the produce from 92 tons 15 cwt. and 1 qr. of quartz.

On the Stock Exchange there has been a large amount of business transacted in Mining Shares during the week, and at increased prices. The following quotations were officially recorded in British Mining Shares:—Cambrian Consolidated (Gold), 4 1/2, 4 3/4; Great Wheal Vor, 39, 38 1/2, 40 1/2, 41 1/2, 40; Grenville, 7 1/2, 7 3/4, 7 1/2; Wheal Ladocott, 3, 3 1/2, 3; East Caradon, 30 1/2; North Wheal Crofty, 4 1/2; Devon Great Consols, 559, 563; West Seton, 211. In Colonial Mining Shares the prices were:—Yudanamutana of South Australia, 34, 33, 33, 34; Port Phillip, 18, 17; Worthing, 1; Cape Copper, 10 1/2, 10 1/2. In Foreign Mining Shares the prices were:—Linares, 6 1/2; United Mexican, 6 1/2, 7, 6 1/2; Fortuna (Limited), 3 1/2; Montes Auros Brazilian Gold, 2 1/2, 2 1/2, 2 1/2; Panuncillo, 2; Cobre, 33 1/2; Copiapo, 5 1/2; Santa Barbara, 3.

The Devon Consols Tin Mining Company, with a capital of 15,000l. in shares of 1l. each, has been formed for working the extensive tin mines situated on the south-eastern mountainous ranges of Dartmoor, held under leases from the Prince of Wales and Lord Churston for 21 years, at 1-18th dues. The purchase-money for the property, machinery, and leases has been fixed at 5000l., the whole of which is to be taken in shares of the company. Mr. Josiah H. Hitchins has carefully inspected and favourably reported upon the property. He states that the grants form a portion of one of the richest localities of the Dartmoor great tin mining district, comprising the very ancient Bachelors' Hall, White Works, Nun's Cross, and Aileborough Mines, which have yielded enormous returns. He considers that the mines "are, doubtless, some of the once very productive tin mines of Dartmoor, which are yet to be rendered much more profitably productive, by employing adequate capital, skill, and energy to open them out deeper—as in the case of the old Birch Tor and Vitifer Mines, which are yielding very remunerative returns, and promise, with much certainty, to rank before long amongst the best tin mines of Devon and Cornwall." In conclusion, he regards them as offering an unusually good opportunity for the profitable investment of money, and by the employment of a comparatively small amount (say from 5000l. to 6000l.) a very handsome percentage of profit will be realised.

The West Tremayne Tin and Copper Mine is about to be worked by a cost-book company, divided into 6400 shares of 1l. each. The sett includes the celebrated old Wheal Jewell, and contains five east and west lodes, and is traversed by the great elvan course that made so productive the celebrated Herland, Relistian, and Rosewarne Mines on the east, and the rich mines of Marazon on the west, which elvan intersects the whole of the lodes, and each intersection has invariably resulted in a large deposit of ore. The necessary plant and machinery have been erected.

The Cumberland Consolidated Lead and Copper Mining Company, with a capital of 60,000l., in shares of 5l. each, has been formed for re-working the Roughen Gill, Dry Gill, and Carrock End Mines. The purchase money has been fixed at 20,000l. in cash, and 10,000l. in paid-up shares. Messrs. Evan Hopkins and Josiah Hitchins have reported very favourably upon the property. The directors consider that they have every reason to expect a produce sufficient to leave a steady and permanent profit of from 15 to 25 per cent. per annum on the capital employed.

The Avonside Engine Company, with a capital of 150,000l., in shares of 10l. each, has been formed for carrying on the business hitherto conducted by Messrs. Slaughter, Gruning, and Co., of Bristol. In addition to the increased general demand for engines and engineers' work, the directors anticipate much additional local demand in consequence of the extensive and important character of the public works in and around Bristol, Gloucester, and the neighbouring ports of Cardiff, Newport, and Swansea. The directors have entered into an agreement for the purchase, on terms very favourable to the company, of the valuable freehold and leasehold land, premises, machinery, plant, stock-in-trade, goodwill, and existing business. The works are at present engaged on contracts of a profitable character, and have been in prosperous operation for upwards of 20 years; they are connected both by a broad and a narrow gauge line laid down on the premises with all the railways and ports in the kingdom. Mr. Slaughter,

who has hitherto been the managing partner, continues in the same position with respect to the company.

The Legislative Assembly of the Republic of Bolivia has decreed the issue of a 7 per cent. Government loan, in bonds of 1000, 2000, and 5000, at 88 1/2 per cent., payable by instalments extending over 18 months, and redeemable at par by lot. The sum of 1,000,000 will be borrowed at once, and the remaining 500,000 will be offered in the course of next year to the then holders of the bonds of the present issue. The proceeds of the loan will be applied to the formation of a credit establishment at Potosi to assist exclusively the mining interests of the State, to the construction of bridges, roads, and other public works, with a view to develop the vast mineral wealth, the guano trade, and the commercial resources of the country generally. Messrs. Seymour and Co. have been entrusted with the negotiation of the loan. As security for the due payment of the interest on, and redemption of, the loan the Government have hypothecated special revenues, yielding about 150,000, per annum.

The Dutch Tramway Company, with a capital of 50,000, in shares of 100 each, has just been formed. The object of the undertaking, the prospectus of which will be found in another column, is to carry out concessions for making and working tramways in the kingdom of Holland and adjacent states. A concession for a double tramway from the Hague to Scheveningue (the Brighton of Holland) has been obtained on favourable terms, and responsible English contractors have undertaken to purchase the land, make the lines, and provide all the rolling stock, horses, &c., for 40,000; the remaining 10,000 will be required for working capital. The works are in active progress, and the lines will be in full operation in the course of May. From carefully prepared estimates, including every contingency, the general result is that a nett dividend of not less than 15 per cent. on the proposed capital may fairly be relied upon. The board of direction comprises gentlemen of considerable influence, both here and in Holland, and Mr. G. F. Smith, of the Antwerp and Rotterdam Railway, is the secretary.

The progress during the past week of other new undertakings, the publication of whose prospectuses has been already announced, is thus reported:—The British Copper Company have received applications for several thousand shares, which are now quoted 1/2 to 1 premium; a highly favourable report has been received from the company's Rednal Mine.—Frontino and Bolivia are quoted 1 to 1 1/2, prem.; New Devon Consols, 1 1/2 to 2, nominal; United Merthyr Colliery, 1 1/2 to 2, premium; and Rossa Grande, par to 1/2, prem.

IRISH MINE SHARE MARKET.—Mining shares closed heavily on Saturday last, without any assignable reason for the momentary dullness. Mining Company of Ireland shares were done at a reduction of 2s. 6d. on Friday's prices of 23l. 12s. 6d., and General Mining Company for Ireland at a fall of 3s. 9d. Crysfort shares were on sale at 18s. 6d., and even for Wicklow Copper a reduction of 10s. per share was demanded by speculators, but without finding sellers at the rate offered. Since the close of last week the market for Mining Shares has much improved in tone, and in a few instances also in price. Mining Company of Ireland shares are now in request at 23l. 15s. General Mining Company for Ireland shares are freely taken at 47s. 6d. to 47l. 10s. Crysfort shares, however, are still heavy at 18s. 6d., but Connorsore shares are in better demand at 19s. Wicklow Copper shares were done at the former rate of 12l. 10s., and are remarkably steady at this quotation.

COAL MARKET.—On Monday 71 fresh ships arrived. The market for house coal was brisk, at fully last Friday's prices. Hartley's comparatively scarce, and rose 9d. per ton; manufacturers' steady, at previous value; best house coal, 18s. to 19s.; seconds, 16s. to 17s. 6d.; Hartley's, 15s. to 15s. 9d.; manufacturers', 13s. 6d. to 15s. 6d.—On Wednesday, the arrival of 80 more ships, and milder weather, produced a less active demand for house coals, but prices quote the same. Hartley's submitted to a reduction of 3d.; manufacturers' as before.—On Friday 123 ships came forward, and a larger amount of business was transacted in all descriptions of coal at last day's quotations. Hetton Wallsend, 19s.; South Hetton Wallsend, 19s.; Lambton Wallsend, 18s. 6d.; Haswell Wallsend, 18s. 6d.; Stewart's Wallsend, 18s. 6d.; Hartlepool Wallsend, 18s. 3d.; Eden Main, 16s. 9d.; Caradoc Wallsend, 17s.; Gosforth Wallsend, 16s.; Hetton Lyon's Wallsend, 16s.; Riddell's Wallsend, 16s.; Framwellgate Wallsend, 16s.; Wharmcliffe Wallsend, 16s.; Hartley's, 15s. 6d.: 38 cargoes unsold; 50 ships at sea.

At Truro Ticketing, on Thursday, 5133 tons of ore were sold, realising 23,162l. 12s. The particulars of the sale were:—Average standard, 131l. 15s.; average produce, 5 1/2; average price per ton, 47l. 10s.; quantity of fine copper, 282 tons 18 cwt. The following are the particulars:—

Date.	Tons.	Standard.	Produce.	Price per ton.	Ore cop.
Feb. 18.	4644	1317 1/2	5 1/2	45 7 6	290 15 0
25.	3374	132 11 0	6	5 3 6	86 10 0
Mar. 3.	2904	129 2 0	6 1/2	5 15 0	87 6 0
10.	2113	129 2 0	6	5 1 0	83 1 0
17.	5133	131 15 0	5 1/2	47 10 0	81 17 0

Compared with last week's sale, the decline has been in the standard 1l. 5s. and in the price per ton of ore about 1s. 6d. Compared with the corresponding sale of last month, the decline has been in the standard 9l., and in the price per ton of ore about 10s.

At the Swansea Ticketing, on Tuesday, 3337 tons of copper ore were sold, realising 47,740l. 13s. The particulars of the sale were:—Average standard, 102l. 14s. 6d.; average produce, 16 1/2; average price per ton, 14l. 6s.; quantity of fine copper, 538 tons 2 cwt. The following are the particulars of the sales during the past month:—

Date.	Tons.	Standard.	Produce.	Price per ton.	Ore cop.
Jan. 26.	1651	121 7 0	12 7 1/2	13 0 0	103 8 0
Feb. 23.	1656	111 15 6	14 1/2	13 16 0	97 17 6
Mar. 15.	3337	102 14 6	16 1/2	14 6 0	88 14 0

Compared with the last sale, the decline has been in the standard 10l., and in the price per ton of ore about 12l. 12s. 3d. Compared with the corresponding sale of last month, the decline has been in the standard 16l., and in the price per ton of ore about 22l. 12s. Of the 3337 tons sold on Tuesday, 1248 tons were British ores, which gave an average produce of 11 1/2, and sold at an average standard of 107l. 19s.—9l. 8s. per ton of ore; the remaining 2089 tons were foreign ores, which gave an average produce of 19 1/2, and sold at an average standard of 100l. 18s. 6d.—17l. 1s. per ton of ore. On April 5 there will be offered for sale 1846 tons of ore from Berehaven, Knockmahon, Yudanamutana, Lisbon, Dhurode, Crookhaven, &c.

At the Great Wheel Vor United meeting, on Wednesday (Mr. George Newman in the chair), a dividend of 10s. per share was declared, leaving a balance of 3000l. to be carried forward to the next account. Details in another column.

At the Tincroft Mine meeting, on Wednesday, a dividend of 10s. per share was declared, and the balance carried forward was increased by 400l. The manager stated that more ore had been discovered in the 180 ft. level during the past quarter than had been returned from the whole of the mine during that period.

At the St. Day United Mines meeting, on March 10 (Mr. John Balster in the chair), the accounts showed a profit upon four months' operations of 1600l. 15s. 2d. A dividend of 5s. per share was declared. Details in another column.

At the Wheel Uny meeting, on Wednesday (Mr. P. L. Hinds in the chair), the accounts showed a credit balance of 1251l. 11s. 3d. The profit upon the quarter was 450l. The report of the agents stated that the prospects never looked better than at present, looking at the immense quantity of tinstone to be taken away from around Goddard's shaft, and also at the improvement in the 100, on the north part. To increase their returns a new steam-whim was required, which they would recommend to have at once erected. It was explained that during the quarter there had been a large outlay for extra work. It was decided to erect a steam-whim.

At the East Clogau Gold Mining Company (second annual) meeting, on Monday, the report of the directors was received and adopted. The details in another column.

At the Boswell and Wheel Castle meeting, on March 9, the accounts showed a loss on the quarter of 167l. 9s. 1d., and a debit balance of 2417l. 10s. Captains Roach and Hattam say:—"The general appearance of the mine is, we think, rather improved. We hope to be able to raise 20 tons of tin for the coming quarter."

At the Wheal Curtis meeting, on March 10, the accounts showed a debit balance of 2516l. 9s. 6d. A call of 30s. per share was made. Capt. Skewis and Terril reported on the mine: they say—"We have sold since our last meeting 22 tons of ore for about 112l., and have sampled 33 tons more, worth about 57l. per ton, with about 26 tons of halvans, about 200l. worth. The result of the working on the Dumping lode, west of slide, has exceeded our expectations, and from the appearances presented on the Dumping and Curtis lodes, as seen in the adit for about 800 fathoms in length, together with the character of the east and west lode, which will intersect these lodes, and from the locality and position of the sett, we have every reason to expect a profitable and lasting mine."

At North Roskar Mine meeting, on Tuesday, the accounts showed a debit balance of 1762l. 3s. 10d. A call of 2l. per share was made. Captains Vivian, Angove, and Hosking reported on the mine: they say—"We are getting on well with the steam stamps and dressing-floors, and hope to be in good order of working in about two months, by which time we shall have an extra stock of tinstone, to the amount of 15 tons of black tin. The extra cost continues excessively high, in preparatory work for the steam stamps and the new steam-whim, both at surface and underground."

At Roskar-noweth Mine meeting, on Tuesday, the accounts showed a credit balance of 1797l. 2s. 10d. Captains Vivian, Angove, and Hosking reported on the mine:—"Wheal Wellington engine-shaft, on South Roskar lode, is completed to the adit

level; and we are now fully prepared for the erection of a suitable steam-engine, which is necessary to develop the mine."

At East Trekerby Mine meeting, on March 12, the accounts showed a debit balance of 131l. 8s. 9d. A call of 4s. per share was made. Capt. Nancarrow and Knuckey reported on the mine, which "opens out exceedingly well, and as the lower workings are cleared out the returns will doubtless increase, but there is not likely to be an increase of cost. Our prospects were never so good as they are now, and there is every appearance of our opening up a profitable mine."

At Caradon Vale meeting, on Wednesday (Mr. S. Beisly in the chair), the accounts for the four months ending Dec. showed a credit balance of 1804l. 17s. 7d. Capt. Barkell and Johns reported upon the various points of operations. The lode, as a whole, is of a highly promising character, and they believe that it will produce large quantities of copper ore.

At the South Gylls ordinary general meeting, on March 12 (Mr. John Haffenden, jun., in the chair), the report and accounts were unanimously adopted; the meeting recommended the shareholders to subscribe for the forfeited shares. Messrs. J. Haffenden, jun., and E. G. Fellowes were re-elected directors, and Mr. E. S. Harding auditor for the ensuing year: 6l. 6s. to be paid for the audit. Thanks were voted to the directors, and to Mr. F. Cookson, the managing director, when the meeting separated.

The directors of the Montes Aures (Brazilian) Gold Mining Company have received from their representative at Montes Aures a very carefully drawn up return of a series of experiments made by the reduction officer in the month of Dec. It appears from this return, that making use of the old set of ten stamps which belonged to the former company, and were known to be too inefficient to be employed profitably on any other reduction works than for experiments to determine the relative richness of the auriferous stuff in various parts of the estate, Mr. Gunther is able to show that with only one set of 24 stamps of similar construction to the old set, he should be able to extract 22,517 dwt. of gold per annum from comparatively poor quartzose and other slate taken across the mine by large open cutting from footwall of quartzband, nothing having been taken from the quartzose and quartz channels forming the west side of the large auriferous deposit, the actual open cutting not covering the whole width of the east channel of auriferous ground.

NEWCASTLE-ON-TYNE, MARCH 17.—The mining market during the past settlement has been active for West Chiverton, Chiverton Moor, Copper Hill, Chiverton Valley, and Wentworth Consols shares, the two latter being "operated" in to a very considerable extent at higher prices. Local shares inactive, and nominal. Tyne Head is reported to be looking very well; it is to be hoped that the recent improvement will lead to something good before long.—EDWARD BREWIS.

PEAT FOR SMELTING IRON.—This subject being one of national importance, the readers of the Journal will be glad to learn that a process of preparing the peat has been discovered, which is described as very simple, and capable of being carried on almost entirely by machinery, which is not easily liable to derangement; the fuel is produced at a very small cost, and, at the same time, an enormous quantity can be made. The drying process is new, and as soon as the fuel is produced in the shape required, it is taken direct to the ovens, where it is carbonised. Much money has been expended in experiments on the various products of peat, but it is considered that the manufacture of fuel only has never yet been fairly tried on a large scale. It is to be hoped this problem is now solved, and that the immense deposits of peat may be rendered available for producing iron of quality second to none in the world. First-rate iron ore can be had in situations where it has been neglected, from being so far from fuel. Other metals can also now be smelted where produced, so that the subject opens up a wide field for the profitable employment of capital.

BREACH OF THE SPECIAL RULES OF A COLLIERY.—At the Hyde Petty Sessions, on Monday, John Reece, a collier, was charged that whilst working at Bayley Field Colliery, Newton, he did, contrary to the provisions of the Mines Regulation and Inspection Act, violate the special rules of the colliery by using a naked light whilst removing props. Edward Phillips, the underlooker, stated that the defendant had, contrary to the special rules of the colliery, taken his lamp off whilst removing props, and had taken a naked light, being the lamp of an explosion took place. The witness added that the defendant had hitherto been found a careful man, and, under the circumstances, the masters did not wish to press the case.—The Bench said the defendant had been guilty of a very serious offence, which might have caused the loss of many lives. He would be fined 5s. and costs, or 21 days' imprisonment, but in future they would inflict a serious punishment.

BOILER EXPLOSIONS AT COLLIERIES.—With reference to boiler explosions at collieries and ironworks, Mr. Peter Spence, of Manchester, observes that such works are in most cases surrounded by heaps of debris, largely impregnated with iron pyrites, from which an acid sulphate of iron constantly exudes, and finds its way into the water supply for the boilers; corrosive action is, therefore, the immediate consequence, and if this is allowed to go on uncorrected, explosion is the ultimate and not very distant effect. Fortunately, an easy remedy for all this is available. Some two years since, Mr. Spence published the mode he had adopted with his own steam-boilers to prevent corrosion, or rather to stop the action from water impregnated by its being in the vicinity of coal pits, and this mode he had still in operation with perfect success. For every boiler 2 lbs. of soda ash (an article easily procured at 1 1/2d. per lb.) is every day given to the stoker; this he dissolves in a bucket full of cold water, and puts the solution into the water supply for the boilers; this he does as part of his imperative daily duties, and the consequence is that now not the slightest corrosive action takes place, an additional advantage being that no crust is ever formed in his boilers, all the lime salts that form these crusts being also destroyed by the alkaline solution. If this remedy were generally adopted, explosions from corroded boilers would be unknown.

THAMES TUNNEL COMPANY.—Receipts for the week ending March 5, 70l. 14s. 9d.; number of passengers, 18,177.

TO INVENTORS AND PATENTEES.—A GENTLEMAN having an extensive connection with manufacturers, merchants, and others, would be glad to UNDERTAKE the SALE of INVENTIONS or PATENTED ARTICLES, on commission.—Apply to Mr. RAWLEY, patent office, 14, Clare-street, Bristol. N.B.—Continental and foreign agents solicited.

TO ASSAYERS AND MINING AGENTS.—TO BE SOLD, A COMPLETE SET OF ASSAYING APPARATUS, with FURNACES, complete.—Apply to "N. T." 3, Coburg-place, Kennington.

BROAD GAUGE TRUCKS TO BE LET, ON HIRE.—Apply at the offices of the Glyn Neath Steam Coal and Iron Company (Limited), 25, College-hill, Cannon-street West, E.C.

DIVIDEND TEN PER CENT. PER ANNUM.—TO BE SOLD, FIVE HUNDRED SHARES (of £1 each, fully paid-up), at par, in the WIVELISCOMBE SLATE COMPANY (LIMITED).—Apply to Mr. RUNDALL, 43, Moorgate-street, City.

MONEY.—CONTRACTORS AND OTHERS can be ACCOMMODATED with LOANS, DISCOUNTS, &c.—Apply to Messrs. WILKINSON and CO., monetary negotiators and arbitrators, &c., 25, Birch-lane, Cornhill, London, E.C.

MR. WILLIAM REAY, JUN., MINING ENGINEER AND METALLURGIST, has JUST RETURNED from an interesting EXPLORATORY EXPEDITION to a NEW MINING DISTRICT in BRAZIL, and again places his SERVICES at the DISPOSITION of his FRIENDS and the PUBLIC, to EXAMINE and REPORT UPON MINES, or REDUCTION WORKS, especially gold and silver.—Apply personally, or by letter, to Mr. W. REAY, jun., Spread Eagle Hotel, Gracechurch-street, London, E.C.

MR. C. H. ANDREWS, STOCK, SHARE, AND MINING BROKER, 7, CROSBY HALL CHAMBERS, BISHOPSGATE STREET, E.C. Andrews's "Stock Exchange Evening Prices and City Financial Circular" contains an epitome of the day's transactions in the English Funds, Foreign Stocks and Bonds, Railways, Joint-Stock Banks, Miscellaneous Shares, and Mines. Andrews's "Daily Circular" also contains particulars of the movements in Bullion, variations in the Foreign Exchanges, and impartial accounts of the Money and Discount Markets.

MR. THOMAS CARTHEW, MINING OFFICES, 12, BUCKLESBURY, LONDON, E.C. Reliable information respecting mining generally can be obtained by applying as above. Bankers: Roberts, Lubbock, and Co., 15, Lombard-street, London.

MR. JOHN BATTERS, STOCK AND MINING SHAREBROKER, 13, THROUGHOUT STREET, LONDON, E.C., pays particular attention to the DISPOSITION of Lead, Copper, and Tin Mines, for which he solicits orders to sell or buy, at net prices.

Mr. BATTERS can recommend one or two mines safe for an early rise of 100 per cent.; reliable information afforded on application. BUYER of Chiverton and Central Miners. State number and lowest price. SELLER of 40 Chiverton Valley, 10 Sthney Wheel Metal, 20 Sthney and Carmichael (the cheapest shares in the market). Parties would do well to apply to Mr. BATTERS as to buying or selling Central Miners shares.

JAMES H. COCK, MINE SHAREBROKER AND DEALER, REDRUTH, CORNWALL. J. H. COCK, having had 10 years' experience in the mining market, and being thoroughly acquainted with mines and their management, is in a position to advise or do business on the most advantageous terms. Cash or time bargains promptly attended to.

MR. J. SYKES, SHAREBROKER, LEAK, has SPECIAL BUSINESS in Dale, Blue Hills Colliery, Crebor, and Grenville, and invites communications from buyers and sellers.

SOUTH AUSTRALIA.—CAPT. BRYANT (for 16 years second captain of the Burra Burra Mines) is PREPARED to EXAMINE and REPORT upon any MINES or MINERAL DISCOVERIES in the ABOVE-NAMED COLONY.—Address, Capt. BRYANT, Koorling, South Australia.

LEAD ORES.				
Sold on the 14th March.				
Mines.	Tons.	Price per ton.	Purchasers.	
Frongoch	80	£13 18 6	Walker, Parker, & Co.	
East Darren	70	17 5 6	J. & J. Williams.	
Cwm Erdd	35	17 9 0	ditto	
ditto	35	17 15 6	ditto	
Sold on the 16th March.				
Iale of Man Mining Co. (silver ore).	100	23 18 0	Frook Works.	
ditto (chats)	30	15 15 6	Stock & Co.	
Sold on the 17th March.				
Dylife	38	14 13 6	Brymbo Co.	

BLENDE.				
Sold on the 14th March.				
Mine.	Tons.	Price per ton.	Purchasers.	
St. Retalack	68	£2 3 6	W. Kenrick.	

BLACK TIN.				
Sold on the 27th February.				
Mines.	Tons c. q. lbs.	Price per ton.	Amount.	Purchasers.
North Jane	1 4 2 35	£26 10 0	£82 4	1—Dausbus & Co.
Sold on the 9th March.				
North Croft	8 12 0 0	70 12 6	—	—
Sold on the 14th March.				
St. Wh. Ver	43 2 3 10	—	3114 6 11	—

COPPER ORES.				
Sold on the 15th March.				
Mines.	Tons.	Price per ton.	Amount.	Purchasers.
Parya	145	£7 1 6	—	C. Lambert.
ditto	145	7 1 6	—	Mona Co.

COPPER ORES.				
Sampled February 24, and sold at Swansea March 15.				
Mines.	Tons.	Produce.	Price.	

Mines.	Tons.	Produce.	Price.	
Cape Cop. Co.	87	80	£37 0 0	
ditto	86	31 1/2	28 10 6	
ditto	85	30	26 15 0	
ditto	84	31 1/2	27 7 6	
ditto	83	30	27 1 0	
ditto	81	29 1/2	26 9 0	
ditto	67	28	25 5 0	
ditto	19	37 1/2	33 5 0	
ditto	4	14 1/2	17 5 0	
Cuba	95	14 1/2	12 17 0	
ditto	90	14 1/2	12 17 0	
ditto	19	77 1/2	65 0 0	
ditto	88	14 1/2	12 18 0	
ditto	86	14 1/2	12 14 0	
ditto	16	76	64 3 0	
ditto	85	14 1/2	13 0 0	
ditto	15	73 1/2	61 16 0	
ditto	52	21 1/2	19 18 0	
ditto	14	74 1/2	62 2 6	
ditto	8	76	62 15 6	
Knockmahon	136	11 1/2	10 8 0	
ditto	125	10	8 19 0	
ditto	52	11 1/2	10 12 0	
ditto	149	9 1/2	8 5 0	
Genoa	7	16 1/2	14 15 0	
ditto	16	13	11 14 0	
ditto	49	9	8 0 0	
ditto	13	3 1/2	2 12 6	
ditto	3	11 1/2	10 4 0	
ditto	76	9 1/2	8 8 0	
ditto	63	9 1/2	8 6 6	
ditto	8	10 1/2	9 7 6	
ditto	2	8 1/2	7 12 0	
Berehaven	116	10 1/2	9 14 0	

TOTAL PRODUCE.				
Mines.	Tons.	Produce.	Price.	Standard.
Cape Copper Co.	602	£16,359 0 0	0	0
Cuba	608	11,304 1 0	0	0
Knockmahon	462	4,313 12 0	0	0
Genoa	241	2,013 13 0	0	0
Berehaven	208	1,994 12 0	0	0
Seville Ore	186	735 12 0	0	0
Leighorn Bulk	156	1,389 1 0	0	0
British Regius	201	3,468 8 0	0	0
French Slag	133	212 16 0	0	0
Connorsore Ore	89	218 1 0	0	0
Copper Slag	78	108 3 0	0	0

COMPANIES BY WHOM THE ORES WERE PURCHASED.			
	Tons.	Amount.	
Copper Miners Company	173	£1547	9 0
Freeman and Co.	85	2273	15 0
Grenfell and Sons	849	7086	4 0
Sims, Williams, and Co.	608	8823	5 0
Vivian and Sons	1039½	12215	16 6
Williams, Foster, and Co.	768	9480	0 6
Bankart and Sons	28	1409	14 0
Charles Lambert	87	2349	0 0
Sweetland, Tuttle, and Co.	36½	1568	16 0
Jennings and Co.	13	26	19 0
Total.....	3337	£47,740	13 0

THE CREDIT MOBILIER COMPANY OF LONDON

(LIMITED).
Capital £20,000, with power to increase.
TRADE.
JOHN GOULD AVERY, Esq., 40, Belsize Park, N.W.
JAMES HOOKE, Esq., 35, Aldermanbury, E.C.
BANKERS—The London and Westminster Bank, Lothbury, E.C.
The company discount approved mercantile and other bills, make advances on negotiable and other securities, for short or long periods, and undertake financial business generally, either as principals or agents.
By order,
WILLIAM HALL, Sec.
(Entrance in Hercules-passage.)

EAST TYWARNHAILE MINING COMPANY

(LIMITED).
Incorporated under the Companies Act, 1862, which limits the liability of each shareholder to the amount of his share.
Capital £30,000, in 6000 shares of £5 each.
5s. per share to be paid on application, 5s. on allotment, the remainder in calls not exceeding 5s., and at intervals of not less than three months.
DIRECTORS.
Sir E. PEARSON, Wimbeldon, Surrey, S.W.
EDWARD BRADFORD, Esq., 2, Shrewsbury Villas, Westbourn Park, W.
HENRY EMANUEL, Esq., 6, Stanley Gardens, W.
ARTHUR S. ORMSBY, Esq., M. Inst. C. E., 1, Kensington Park-terrace, W.
BANKERS—Messrs. Miners' Bank, Camborne.
LONDON CORRESPONDENTS.
Messrs. Roberts, Lubbock, and Co., 15, Lombard-street, London, E.C.
Solicitor—Wm. St. Aubyn, Esq., 38, Moorgate-street, E.C.
SECRETARY—C. R. Webb.
SUPERINTENDING AGENT—Capt. Stephen Thomas, of Redruth.
OFFICES,—198, GRESHAM HOUSE, LONDON, E.C.

This mine is situated in the parish of St. Agnes, in the county of Cornwall, in the immediate proximity of, and surrounded by, some of the richest mines of the district. It is bounded on the west by the Great Tywarnhaile Mine, which, under the supervision of Messrs. John Taylor and Sons, paid large dividends, and is now being successfully worked, with powerful machinery and every appliance to open up a great mine, with what complete success will be seen from the following extract from the report of the agents and Capt. Stephen Lean, presented to the last general meeting of shareholders:—"The 100, east of Bennett's, is worth 3 tons of copper ore per fm. The 20 east is producing about 3 tons of ore per fm. The cross-cut south from the 80 east is without change. The 40, east of Bennett's, will produce 1 ton of ore per fm., and has a kindly appearance for further improvement. Railway shaft is producing 2 tons of ore per fm. James's shaft is not looking quite so well, producing about 3 tons of ore per fm. for its length. The 70, west of Haynes's, is at present worth 1 ton of ore per fm. The tribute pitches are without change.—J. NICOLLAS, J. DAW."

Also, the following is a more recent report, extracted from the *Western Daily Mercury*:—"TYWARNHAILE MINE: A most important discovery has recently taken place in this mine, in the 75. At Haynes's a lode has been cut into, and is now worth £40 per fm., the ore being of a high quality. This appears to be on the top of a large deposit of ore, and there is little doubt but that Tywarnhaile Mine will be one of the best copper mines in the country."

Also, west on the same run Great Charlotte yielded a profit of £87,000, and Wheel Basset, Wheel Tregon, and Old Tregon paid very large dividends.

On the east, Trenithick, East Wheel Ellen, and Polberro Consols have remunerated the shareholders by handsome dividends.

On the north is Wheal Towan, which gave £400,000 dividends. On the south are Wheal Music, Wheal Harmony, North Treaskerby, and other mines, amongst the most profitable in the county.

The western part of this set was worked about 15 years ago as Wheal Fancy, and the eastern part 34 years since as Prince Royal.

Wheal Fancy is 20 fms. under adit, which is 10 fms. deep; it was sunk to that level when Tywarnhaile last worked, and stopped on account of water, when Tywarnhaile engine ceased to work; when stopped the lode was rich for copper ore. In the 10 fm. level, east of the shaft, the lode is 6 ft. wide, and tin in large quantities may be raised from this level at once.

The Prince Royal engine-shaft is 32 fms. under adit, which is 10 fms. deep. At that level a short cross-cut south intersected the lode, which emitted so much water as to render it impossible to proceed further; this water is now drawn by the Great Tywarnhaile engine. In the 17 fm. level there is a good course of copper ore. Eight men on tribute, at 4s. 6d. in £1, earned on the average £8 per man for the month of four weeks; at that time the standard was only £96 per ton, and the price realised for the ore £10 14s. per ton. In the same level one man raised 4½ tons of copper ore in one month, which was sold at £15 per ton.

This mine was worked by the late Capt. Thomas Teague, and abandoned when the Great Tywarnhaile ceased to work. There are five very productive east and west lodes traversing this set, two cross-courses running in a north and south direction, and fine elvan courses. This set is about three-quarters of a mile in length, and about half a mile in width. There is a splendid stream of water, applicable to stamping and dressing purposes. The mine being dry now for more than 100 fms. from surface, operations could be commenced at once, and large returns of ore made without the aid of pumping machinery. The roads are good, and miners in the district are ready to take pitches on a low tribute. The shafts, levels, and footway are in good condition.

It is the confident opinion of practical men, conversant with the property, that before one-half of the proposed capital is expended the returns of ore will be sufficient to pay handsome dividends to the shareholders.

An agreement has been made for the purchase of the mines for the low price of £8000, which includes all expenses up to the allotment of shares.

A large number of shares are already applied for, and operations will be commenced as soon as the directors in their discretion shall see fit.

The following reports from well-known mine agents explain the nature and value of this property.

Report of Captain STEPHEN THOMAS, of Wheal Prudence.

Jan. 27, 1864.—We have cleared the shafts and put in a footway to the bottom of the mine 65 fathoms from surface. The main shaft is about 58 fathoms from surface and 30 fathoms on the course of the lode, or 20 fathoms under the deepest level; 30 fathoms east of this shaft a winze is sunk 8 fathoms, and a level driven east on the course of the lode 10 fathoms, lode about 5 feet wide, composed of capel, mixed with copper ore and muddle—a very kindly lode. In the west end of this level water is going down, which proves this lode to be open, and I think that a good course of ore will be met with here, as the ends driven towards it in Tywarnhaile are on rich lodes, improving in driving east. The 20 fathom level is driven east from shaft about 70 fathoms, through a lode from 4 to 6 feet wide, worked away in several places for ore. This level is driven west about 36 fms. through a lode, 5 ft. wide, composed of ore, Jack, muddle, &c. The 20 fm. level is driven east from about 60 fathoms; the lode varying in size from 3 to 7 ft. wide; a great deal of ground has been worked away both in the back and bottom for ore; the lode in the end is 5 ft. wide, mixed with muddle, priam, peach, and ore. No ground opened west from the shaft at this level. The adit level is driven east from shaft about 28 fms. through a lode 6 ft. wide; a great deal of ore ground has been taken away both in the back and bottom of this level, and the lode in the end is very good. The shallow adit is driven east about 26 fathoms through a lode, 6 feet wide, and a large quantity of ground taken away for ore. This is on Tywarnhaile lode. There are two other lodes to the south, called Wheal Charles lode and Hot Water lode, from which a great deal of mineral has been raised. I would recommend to sink the shaft from the 20 to the 30, where it is very likely we shall find a good lode of ore, also to drive the deep adit level east, and sink a shaft down on the lode on the eastern part of the set; and if we work the ground effectually, on the different lodes, it is my opinion that a good mine will be opened up in a short time, more especially as it is a dry mine, and returns can be made at once. The 10 is driven east about 50 fathoms; the lode large throughout, composed of ore, Jack, muddle, about 7 ft. wide. A more promising lode cannot be seen.

Report of Captain JOHN TONKIN, late of Chacewater, now manager of the St. John del Rey Mines.

This mine is situated in the parish of St. Agnes, in Cornwall, and includes Wheal Fancy and Prince Royal Mines. It adjoins Great Tywarnhaile Mine to the east, the driving-engine of which is not more than 300 fathoms from the boundary, and has occasioned this mine to be drained, so that there is nothing required but to clear up the mine, place in ladders, erect a horse-wheel and tackle, when copper ore can at once be brought to surface. The Prince Royal Mine has been worked by the late Capt. Teague, of Redruth. Prince Royal shaft is 32 fathoms under adit, sunk perpendicular in the country. At the 17 they had a good course of copper ore; eight men on tribute at 4s. 6d. in £1 earned £8 per man in four weeks, when the standard was £96 per ton. The ore sold at £15 per ton. A cross-cut was driven a short distance at the bottom of the mine (32 fathom level), which let out so much water that the small engine could not drain it. This, with peculiar circumstances, caused the suspension of the mine. East Tywarnhaile is situated in a rich mineral district, surrounded by the Great Tywarnhaile, Wheal Towan, Wheal Music, and Great Wheal Charlotte; within a distance of five miles upwards of £1,500,000 has been realised in dividends. The Wheal Fancy part of the mine can be worked for years without the aid of steam-power. A fine stream of water runs through the set on the north boundary, applicable to stamping and dressing purposes. There are five champion lodes traversing the set, also elvan and cross-courses, &c. It is my decided opinion that a small capital, judiciously applied, will make this a profitable and lasting mine. The sum of £200 will clear up the workings and erect horse-wheels, so that returns can be made of copper at once.

Statement of Mr. JOHN GOYNE.

I worked as a miner in the Prince Royal Mine, in the parish of St. Agnes, about 32 years back; engine-shaft about 32 fathoms deep, where they drove a short distance south and cut the lode, but not through it. The water increased so much, which prevented them from cutting through the lode, the engine being so small that they could not keep the water out (the water that came from the lode was very black); on account of the influx of water they were obliged to abandon the mine. The 22 fathom level is extended east about 25 fathoms, and west about 20 fathoms. A strong lode throughout; the lode is not seen under this level. The 17 fathom level was worked on tribute from 4s. 6d. to 8s. in £1; in the former eight men got £8 per man in four weeks. In the 12 fm. level the lode is large throughout, worked principally on tribute in the back and bottom. The adit level lode is large, and the backs taken away by tributaries; the men got fair wages when the standard was very low. There is a strong lode north and south, which is standing in whole ground, and which is of great importance in the future working of the mine.

I worked in the said mine as a miner, and believe the above statement to be correct and am one of the men that worked at 4s. 6d. in £1.

Extract from the MINING JOURNAL of the 13th February, 1864.

EAST TYWARNHAILE.—This mine immediately adjoins the Great Tywarnhaile Mines, and is in the immediate vicinity of Great Wheal Charlotte, which left profits of more than £2000 per month; of Wheal Towan, which returned upwards of £180,000 in two years; of Wheal Music, which returned upwards of £30,000 profits; is immediately to the north of East Wheal Ellen, which is now opening up so well, and is, in fact, in one of the best districts in the county, in congenial strata, with masterly lodes, intersected by fine cross-courses, and thus possessing all the requisites for forming a profitable and lasting mine. In addition to this, it is drained by the Great Tywarnhaile Mine to a great depth, consequently no pumping machinery will be required, and, under these circumstances, success is almost a matter of certainty. The mine is, we believe, to be worked on the limited liability principle, with an ample capital, of which it is likely that not more than two-thirds will be called up.

FORM OF APPLICATION.
To the Directors of the East Tywarnhaile Mining Company (Limited).
GENTLEMEN.—Enclosed you have £ , being the deposit on shares in the above company, which, or any less number, I hereby agree to accept, and to sign the Articles of Association when required to do so.

THE AVONSIDE ENGINE COMPANY (LIMITED)

(LATE SLAUGHTER, GRUNING, AND CO.) BRISTOL.
Incorporated under the Joint Stock Companies Act, 1862.
Capital, £150,000, in 15,000 shares of £10 each.
Deposit, £1 per share on application, and £2 per share on allotment.
No future calls to exceed £2 per share, and an interval of not less than three months to be allowed between each call.

DIRECTORS.
JOHN BATES, Esq., Director of the West of England Bank, Bristol.
WILLIAM BEVAN, Esq. (late of Messrs. William Bird and Co.), 24, Forebaster-square, London.
HENRY GRUNING, Esq., Grove House, Highbury, London.
GEORGE EDGAR RANKING, Esq. (Messrs. John Ranking and Co.), 11, St. Helen's-place, London.
EDWARD SLAUGHTER, Esq., Avonside Ironworks, Bristol.
CHRISTOPHER JAMES THOMAS, Esq., Chairman of the Bristol and South Wales Union Railway Company, Bristol.
(With power to add to their number.)

BANKERS—The West of England Bank, Bristol. Messrs. Glyn, Mills, and Co., London.
Messrs. Fussell and Pritchard, Bristol.
Messrs. Eldale and Byrne, 3, Whitehall-place, London, S.W.
STOCKBROKERS—William Hartridge, Esq., 80, Old Broad-street.

AUDITORS.
S. J. Cooke, Esq. (Ottoman Railway Company), St. Michael's-alley, Cornhill.
G. A. Hillier, Esq. (San Paulo Railway Company), Gresham House, Old Broad-street.
SECRETARY (pro tem.)—Mr. Henry George Harris.

OFFICES IN BRISTOL—AT THE WORKS.
TEMPORARY OFFICES IN LONDON—80, OLD BROAD STREET.

The company is established for the purpose of constructing and maintaining locomotive and marine engines, and such other work as is usually comprised in the business of engineers and contractors, and disposing of, leasing, or hiring the same to railway or rolling-stock companies, carriers, and others, and for doing all such other things as are incidental or conducive to the attainment of these objects.

The directors have entered into an agreement for the purchase, on terms very favourable to the company, of the valuable freehold and leasehold land, premises, machinery, plant, stock in trade, goodwill, and existing business of the well-known locomotive manufacturers, Messrs. Slaughter, Gruning, and Co., of Bristol, whose co-partnership is about to terminate through efflux of time.

The works are at present engaged on contracts of a profitable character, and have been in prosperous operation for upwards of 20 years; they are connected both by a broad and a narrow gauge line laid down on the premises with all the railways and ports in the kingdom.

Arrangements have been made for transferring the establishment to the Company in full working order, and without suspension for a single day, and an immediate return on the capital is thus secured to the shareholders.

In addition to the increased general demand for engines and engineers' work, the directors anticipate much additional local demand, in consequence of the extensive and important character of the public works in and around Bristol, Gloucester, and the neighbouring parts of Cardiff, Newport, and Swansea.

Mr. Slaughter, the late managing partner, has accepted a seat at the board, and as managing director will continue his services as heretofore; it may, therefore, reasonably be assumed that, with additional capital, increased profitable results will be obtained.

In the event of a less number of shares being allotted than has been applied for, the sum paid on application will be partly applied in payment of the deposits on the shares allotted, and the balance will be returned to the applicant.

Prospectuses and forms of application for shares may be obtained at the works, in Bristol; and of the broker and solicitors; and also of the secretary, at the temporary offices of the company, 80, Old Broad-street, London.

THE NORTH WHEAL SETON COPPER MINES

(LIMITED).
These mines, of amazing promise, are situated in Camborne, Cornwall, one of the richest copper districts in Europe, and a district that cannot be excelled, with respect to quality or quantity, by any copper mines in the world.

With an outlay of only £600,000 on mines in this district, closely adjoining those now offered to the mining interest, profits were realised to the enormous amount of £8,000,000 sterling during a limited period.

The richness of all the adjoining mines is evidenced by the high prices which their shares realise in the market, and by the enormous profits which they realise, as may be gathered from the quoted returns.

One mine, for instance (the West Wheal Seton), bordering on the North Wheal Seton, yielded in one year upwards of £49,000, and still continues to be one of the richest mines in West Cornwall; and others, equally fruitful, in the same neighbourhood, are well known.

The North Wheal Seton is situated on the same strike of metal as the adjoining mines referred to, and there is no room for doubt that its richness and yield must be commensurate with the wealth of its neighbours.

Indeed, this mine, which has been fairly tried, has proved other than extremely rich and highly remunerative; and so highly is the locality valued, that on the slightest discovery being made in any of the mines the shares of all in the vicinity immediately rise in the share market by a considerable percentage.

Applications for shares and prospectuses to be made to Messrs. C. and C. THOMAS, Victoria Chambers, Leeds.

THE BRITISH COPPER COMPANY

(LIMITED).
Incorporated under the Companies Act of 1862, which limits the liability of shareholders to the amount of the shares subscribed for.
Capital £100,000, in 20,000 shares of £5 each. First issue, 10,000 shares.
10s. to be paid on application, and 10s. on allotment.
One-third of the shares have already been taken up. It is not anticipated that it will be necessary to call up more than half of the capital.

DIRECTORS.
ALEXANDER ALISON, Esq. (late of Alison, Merry, and Co., Glasgow), 72, Sloane-street, London.—Chairman.
N. S. HILL, Esq. (of Messrs. J. Hill and Sons), 31, Great Winchester-street, London.
REV. OCTAVIUS FREIRE OWEN, M.A., F.S.A., 23, Carlton Hill, East.
F. R. DE LA TREHONNAIS, Esq., Bickley Park, Bromley, Kent.
JOHN MANNERS, Esq., Hedsor Lodge, Twickenham, London.
Lieut.-Col. BONHAM, 2, Combermere-terrace, Victoria Park-road.
D. G. FORBES MACDONALD, Esq., C.E., F.R.G.S., J.P., 13, Royal Exchange.

BROKERS.
Leigh, Molyneux, and Co., 28, Princess-street, Manchester.
Miller and Sons, 72, Princess-street, Edinburgh.
Robins and Barber, 29, Threadneedle-street.

SOLICITOR—Sheldon D. Ashby, Esq., 9, Clement-lane, Lombard-street.
BANKERS.
The City Bank, Threadneedle-street.
The Commercial Bank, Edinburgh and Glasgow.

AUDITORS—Cash and Edwards.
SECRETARY (pro tem.)—James Milne, Esq.
OFFICES,—2, QUEEN STREET PLACE, CANNON STREET, LONDON.

The reason why the mines purchased by this company have been brought out in one company is not only to save the great expense of three boards of directors, with three sets of books and accounts, but to insure to the shareholders constant and regular dividends. Where there is only one mine something may happen to stop returns for a time, but with three mines in work, continuous returns may be relied on. This is the great reason of the success of the St. John del Rey Mining Company, which pays 30 per cent. dividend; for that spirited company has now five mines, which enable it to keep up its great dividends, although some of its mines may be for a time non-productive.

The Lockfeyne set is very extensive, and contains three large lodes of copper, running through the set for nearly one mile and a half. The width of the grey copper lode is 10 to 20 feet, and the assays of it, made by Mr. Mitchell, of London, are 14, 16, 25, and 35 per cent. The yellow copper lode is 20 feet wide, and the assays 10, 22, and 26 per cent.

The whole of these lodes may be worked by levels, so that there is no water to draw. There is abundance of water power, which will save the necessity of steam-engines to crush and dress the ore. The mines are within two miles of a good shipping port, connected with a road recently made. It would certainly be difficult to find another property in the kingdom combining so many advantages. This valuable mine, which the company has been fortunate enough to secure, is held under a lease of 25 years, with 1-15th of dues. The set is 800 acres on the course of the lodes.

Capt. Trevethick's report estimates the average yield of the bulk of the ore at Lockfeyne, at 10 per cent., and as the average of the Devon Great Consols (which pays £60,000 per annum in dividends) is only 4½ per cent., a more favourable result than even that of the Devon Great Consols may reasonably be anticipated.

The Rednal Mine extends for nearly a mile on the course of the lode, and is held under lease for 21 years, at a royalty of 1-15th. This valuable property is situated within one mile and a half of the Rednal Station on the Shrewsbury and Chester Railway, and within 40 miles of Liverpool, where there are smelting-works to take all the ore that can be raised.

At Alderley Edge, in Cheshire, where the same ores as the Rednal are being worked so successfully, the produce does not exceed 2 per cent., and yet that company pays a dividend of 40 per cent. on its capital, proving the value of this description of ores, and giving the best criterion for estimating the superior results to be expected from the Rednal Mines. As another evidence that the sandstone copper ores are highly profitable to work, the directors need only refer to the Mansfield Copper Works of Germany, where ores of only 1½ per cent. yield large dividends, and give employment to 3000 hands.

A provisional contract has been entered into to purchase the Lockfeyne, Rednal, and other mines, for the sum of £8000 in cash, and 3000 shares of the company, fully paid up; one half of which shares are not to bear dividends until the company has paid a dividend to the shareholders of at least 10 per cent. out of profits.

The outlay required in developing these mines will be unusually small, owing to there being no engine-shafts to be sunk. That the outlay will exceed £5000 on each property, or £15,000 in all, is not probable—in fact, it is more likely that one-half of that sum will be sufficient. The very moderate estimate of 24,000 tons of ore from the three mines, with a profit of £2 per ton, will yield a revenue of £48,000 per annum, or nearly 50 per cent. on the capital.

The directors have much pleasure in calling attention to the annexed highly satisfactory reports from gentlemen personally acquainted with the working of copper mines. Capt. Charles Thomas, of Dolcoath, thinks the Rednal Mine a promising undertaking, and the Lockfeyne Mine as one of more than ordinary promise as a copper mine of great value and importance. Samples of the ores may be inspected at the company's offices, where copies of the prospectus and reports may be obtained. As a large portion of the shares have already been applied for, an early application for the remainder will be necessary.

Applications for shares to be made in the enclosed form, and forwarded to the bankers or secretary of the company, with a cheque for the deposit.

FORM OF APPLICATION FOR SHARES.

To the Directors of the British Copper Company (Limited).
GENTLEMEN.—I request that you will allot me shares of £5 each in the above company, the calls on which I agree to pay; and I hereby authorise you to place my name on the register of shareholders in respect of such shares.
Name in full
Residence
Date

THE DUTCH TRAMWAY COMPANY (LIMITED)

Registered under the Companies Act, 1862, with limited liability.
Capital £250,000, in 5000 shares of £50 each.
Deposit on application, £1 per share, and £2 on allotment.

DIRECTORS.
JOHN CHYNOWETH, Esq., Holland Park, Notting Hill.—CHAIRMAN.
N. D. GOLDSMID, Esq., Director Hague Gas Works Company, The Hague.
JAMES F. GREGORY, Esq., Director Hague Gas Works Company, Brussels.
P. J. LANDRY, Esq., Banker, The Hague.
J. VAN LENNEP, Esq., Chairman Amsterdam Water Works Company, Amsterdam.
ALEXANDER MACDONALD, Esq., 24, Jermyn-street, St. James's.
CORNELIUS WALFORD, Esq., Little Park, Enfield.
JAMES WHITE, Esq., Upton Park, S.ough.

ENGINEERS—Messrs. Street and Marmont, 4, Parliament-street, Westminster.
SOLICITORS—Messrs. Hughes, Masterman, and Hughes, 17, Backlbury, London.
J. De Bas, Esq., The Hague.
BROKER—James Shepherd, Esq., Auction Mart, Bank.
BANKERS—Alliance Bank (Limited), Lothbury; P. J. Landry, Esq., The Hague.

AUDITORS.
J. Le Geyt Daniell, Esq., 2, Royal Exchange-buildings; Messrs. Cooper, Brothers, and Co., Public Accountants, 13, George-street, Mansion House.
SECRETARY—Mr. G. F. Smith.
OFFICES,—16, CANNON STREET, E.C.

This company is formed for the purpose of carrying out concessions for making and working tramways in the kingdom of Holland and adjacent states. A concession for a double tramway from the Hague to Scheveningue (the Brighton of Holland) has already been obtained on favourable terms, and a contract has been concluded with respectable English contractors, by which they undertake to purchase the land, to make the line, and provide all the rolling stock, horses, &c., for the sum of £10,000. The remaining £10,000 will be required for a working capital.

The works are in active progress, and will be completed and brought into operation in the course of the month of May next.

The line will commence in the principal square in the town of the Hague, and follow the ordinary route to Scheveningue, returning by another route, via the Canal and the Zoological Gardens, to the same station, being a total length of about seven English miles. Scheveningue, the only marine suburb in Holland, is resorted to by large numbers of visitors, chiefly from Amsterdam, Rotterdam, Utrecht, and other towns.

From minute information furnished by the town authorities, the number of vehicles employed in this traffic has been ascertained to make 110,000 journeys a year, each conveying on an average six persons, and the total number of visitors now entering Scheveningue in carriages and on foot amounts to about 4,000,000 a year: of these it may be fairly estimated that one-fourth will travel by the tramway. In addition there will be about 20,000 tons of fish, merchandise, and provisions are carried annually between the Hague and Scheveningue, of which it is assumed that one-half at least will be conveyed by the tramway. From existing sources of traffic an annual income of at least £25,000 may be safely calculated upon.

From carefully prepared estimates of the cost of horse keep, wages, repairs, and every contingency, the general result is that a net dividend of not less than 15 per cent. on the proposed capital may fairly be relied upon.

A large number of shares have already been subscribed for in Holland, which furnishes a proof of the high estimation in which this undertaking is held by the Dutch people. Applications for the remaining shares, in the annexed form, may be made to the brokers or to the secretary, at the offices, 16, Cannon-street, but no application will be considered unless accompanied by a deposit of £1 per share. Should no allotment be made to the applicant this sum will be returned in full.—March, 1864.

FORM OF APPLICATION FOR SHARES.

To the Directors of the Dutch Tramway Company (Limited).
GENTLEMEN.—Having paid to your bankers the sum of £ , I request you to allot me shares in the Dutch Tramway Company (Limited), and I hereby agree to place my name on the register of members in respect of such shares.
Name in full
Address in full
Usual signature
Date

CROWAN AND WENDRON TIN AND COPPER MINES

(LIMITED).—Adjoins the celebrated Grenver and Wheal Abraham Mines, leased from the same lord, and contains the same run of lodes.—Apply for prospectus and shares to JOHN BLACKBURN, solicitor and coroner, 63, Albion-street, Leeds.—Capital £80,000, in shares of £1 each; 8000 are already taken up.

PROSPECTUS.
THE CLEVELAND IRON COMPANY (LIMITED).
Registered under the Joint-Stock Companies Acts, whereby the liability of shareholders is limited to the amount of their shares.

Capital £100,000, in 5000 shares of £20 each.
Deposit, £1 per share on application, and £1 on allotment.
No further call to be made for at least three months from allotment, and it is calculated that no more than two-thirds of the capital will be required.
If no allotment is made, the deposits will be returned in full.

DIRECTORS.
THOMAS CAVE, Esq., Sheriff of London and Middlesex.
RICHARD WOOLLEY BURROWS, Esq., Twickenham.
GEORGE CHAMBERS, Esq., Vice-Chairman of the Cork and Youghal Railway of the London and Hamburg Banking Company.
Capt. CORNELL, Director of East Great Work Mining Company.
JOSEPH HOPKINS, Esq., Lawrie Park, Sydney.
GEORGE HENRY MONEY, Esq., 9, Berkeley-street, and Carlton Club.
JOHN SLATER PRATT, Esq., Oakland House, Stokesley, Cleveland.
SIMEON PICKARD WEBSTER, Esq., Kirkstall Hall, Leeds.

BANKERS.
London and Westminster Bank, Lothbury, London.
Branches of the National Provincial Bank of England.

AUDITORS.
Messrs. Deloitte, Greenwood, and Dever, Public Accountants, Lothbury, London.
William James Guy, Esq., York.
Richard Roberts, Esq., Child Okeford, Blandford.

BROKERS.
London..... Albert George Kitching, Esq., 2, Copthall Chambers, Throgmorton-street.
Manchester..... George Whitworth, Esq., 36, Brown-street.
Birmingham..... Messrs. Massey and Son, 2, Cherry-street.
Hull..... Robert Ash, Esq., 9, Bowdley-lane.
Leeds..... Messrs. Joseph Kitching and Son, Change-court, Albion-street.
Solicitor—A. Watson, Esq., 18, Cannon-street, London.
SECRETARY—W. Edwards, Esq.

TEMPORARY OFFICES,—15, UNION COURT, OLD BROAD STREET, L.

This company is formed for the purpose of working and winning the iron ore under the estates of Skelderskew and Fowle Green, in Comondale, in the Cleveland district, in the North Riding of the county of York, and for the erection of blast-furnaces, rolling mills, &c.

These estates are about 220 acres in extent, and held under lease for 99 years at rent of £300, merging into a royalty of 4½d. per ton of 22½ cwt. on all ore raised on 16,000 tons per annum.

The property is situated in the very centre of the Cleveland district, and the ore to be erected will be within 20 yards of the North Yorkshire and Cleveland Railway about 19 miles distant from Stockton-on-Tees, 14 miles from Middlesbrough, and 18 miles from the port of Whitby, offering facilities for railway communication not surpassed by any other field in the district.

The well-known tract of ironstone worked by Messrs. Baring Brothers and Co., London, adjoins on the north-west, and from the position of their works the thick Cleveland bed of ore will be found at a depth of about 40 fms., and the dip of the bed being south 70° east, is near the true dip of Messrs. Baring's mines.

The quantity of ironstone under these estates is estimated at about 5,000,000 tons. The following extract from the evidence of John Phillips, Esq., Professor of Geology and Mineralogy in the University of Oxford, before a Committee of the House of Commons on the "Cleveland Railway Bill," in May, 1858, will give some idea of the important district:—

"I am intimately acquainted with the Cleveland iron fields. There could be no doubt that the ironstone in the whole of that district was very abundant and good. Large parts of Cleveland every acre might be computed to yield 30,000 tons. It might be true to say that more iron was positively to be extracted from the Cleveland hills than from the whole of Great Britain. The ore yielded generally 31 per cent. The produce of iron in the British dominions is about 3,500,000 tons annually, which will require 12,000,000 tons of ore. There is sufficient ironstone in Cleveland to last for many hundreds of years."

Likewise the following extract from the evidence of I. L. Bell, Esq. (of the firm Messrs. Bell Brothers, eminent ironmasters), before the same committee, will show the immense extension of the iron trade in Cleveland.

"I am a proprietor of ironworks on the Tees, on the Wear, and other places. I have at Newcastle. We are issuers of extensive fields of Cleveland ironstone. The price of ironstone in Cleveland is 3s. 6d. per ton, whilst in Staffordshire it is from 1s. to 2s. According to the Mining Records the quantity of ironstone taken from the Cleveland hills was 650,000 in 1855; 855,000 in 1856; and 1,246,612 in 1857. In 1857 there were three blast-furnaces in the district; in 1858 there were 42; and in Durham 17; making 69 furnaces built within five years. In addition to those there were 100 furnaces in the district, originally selected for sm

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and various adaptations. By HENRY DIKES, C.E., &c., the Inventor.
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CHIVERTON MINING DISTRICT.—A MAP of this celebrated
district, embracing the whole of the PERRAN MINES, WILL BE PUBLISHED
SHORTLY, by subscription, at 21s. each, coloured and mounted; or 16s. unmounted.
Subscribers will be supplied in the order in which they give their names to the author,
R. SYMONS, surveyor, Truro.—Truro, November 26, 1863.

MR. BRENTON SYMONS, M.E., has RETURNED from
CORNWALL, and will be happy to AFFORD any INFORMATION respecting the
CROWAN MINING DISTRICT, to which he has particularly directed his atten-
tion. The Geological Map of this district will be published very shortly.
18, Hatton-garden, March 3, 1864.

MR. JOHN H. CLEMENT, F.G.S., &c., CONSULTING
MINING ENGINEER,
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ries, or collieries.
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MR. CLEMENT begs to ADVISE his CLIENTS that he will be
ABSENT IN SPAIN for the SPACE of FIVE to SIX MONTHS, which may
delay answers to any letters that may be addressed to him. Letters on business to be
addressed as usual, which will be forwarded to him in Spain.—March 14, 1864.

Notices to Correspondents.

•• Much inconvenience having arisen in consequence of several of the Numbers during
the past year being out of print, we recommend that the Journals should be regularly
Ald on receipt: it then forms an accumulating useful work of reference.

GOLD OR SILVER—WANTED, A MINING SETT IN EUROPE OR AMERICA. The corre-
spondent whose advertisement, signed "G. S.," appeared in the Journal of Jan. 1,
will oblige by sending to our office for a letter, which has been forwarded to us from
abroad, with a request that it should be handed to him.

CEFFS CLIKEN MINE.—I take the liberty of asking through the Journal what the direc-
tors of this company are doing? I have written to the secretary to obtain information,
with a promise, but can get no report. Now, as such a course is suicidal to mining
interests generally, and especially to this mine, I claim an answer from them publicly,
as I fail to obtain it privately. I consider the shareholders have much cause of com-
plaint about this mine. Another call has been made.—A SHAREHOLDER.

NEW DEVON CONSOLS COPIER MINE.—Will the secretary, or anyone connected, inform
the public in what part of the large parish of Lamerton the above mine is situated,
to what depth it has been worked before, and under what name?—ADVENTURER.

PUMPING APPARATUS—UNDERLIE OF LODES.—I have received a note from my friend, Mr.
N. Ennor, respecting my reply to the question of "Alfonso" on pumps, and the great
underlie of a lode, which appeared in the Journal of Feb. 13. Mr. Ennor thinks I
should have found the greatest underlie a lode could have at 1 fm. perpendicular, and
not on 1 fm. of the lode, as I calculated. As it is very probable this was also "Al-
fonso's" meaning, I have ascertained the base or underlie which would be given by a
lode dipping 89° 59' 59" from the perpendicular at a depth of 1 fm., and find it would be
about 230 miles, or about 3 1/2 miles of base for every inch in depth. It may, how-
ever, be stated generally in this case that the underlie of a lode will vary from nothing
to the nearest approach to infinity which we can conceive, without ever becoming in-
finite.—WM. RICKARD, *Alcester House Academy, Liverpool, March 10.*

GARLANDIA UNITED MINES.—In answer to an enquiry which appeared in last week's
Journal respecting this mine, I beg to say that since the last meeting of adventurers
we have been cross-cutting our north ground. We have two shafts, from which we
have four cross-cuts constantly going, with six men in each; our object being to cut
the north ground through as quick as possible, to ascertain what lodes we have, and
what to sink and drive on. We have intersected several branches, most of which
contain tin; some of them we shall drive east on when we are satisfied with our
cross-cuts. We did expect before this to have reached one of the Bassett and Grylls
lodes. We find in Bassett and Grylls that the lode is turned off more southerly, which
makes the cross-cut longer than we expected. We have four cross-cuts in course of
driving, and two ends driving east of Cope's shaft, on two lodes, with six men in one
end and two in the other; lode in each end producing a little tin. We have a very
kindly piece of ground before these ends. We have sent reports of our operations,
which have appeared in the Journal; and our meeting will take place next week,
when a detailed report will be given.—JAMES ROWE.

LANGAN MINES.—Seeing in the Journal of Feb. 27 an account of a meeting of this
company, held at their offices in London, in which it is stated that they had a favour-
able report of the mine by Mr. Cottingham: if so, what is the reason it is not pub-
lished in the Journal, especially as the directors are about to issue more shares? I
know the mine well, and that part of the country in which it is situated, and would
advise parties about to extend their interests to consult Capt. John Kessell, now at
the Val de Gorge, Hautes-Alpes, France, who is a practical mining captain, and
that part of the country, and one that will give his candid opinion. What is the reason
the directors do not state the cost of sinking the shaft 12 fms., as that is reported to
have been all the work done by this company in developing the mine?—A MINER.

SOUTH FOXDALE.—Will someone acquainted with the actual position and prospects of
this undertaking, kindly inform me what progress is being made towards bringing
it into a profitable state? Is it efficiently managed, with competent agency, and a
sufficient number of men?—SHAREHOLDER.

MINING IN CANADA.—A well-informed correspondent, possessing unusual facilities, is
desirous of entering into communication with some English capitalists, with the view
of working some very valuable sets, which his colonial influence has enabled him to
secure. Letters addressed "Canada," sent to our office, will be forwarded.

GRANBLER AND ST. AUBYN TICKETINGS.—"H. C." (Monkstown) had better write the
pursuer with regard to the very considerable difference complained of. "H. C." must
understand that the quantities given in the Ticketing Papers are simply from esti-
mates made with the eye, but an experienced agent will seldom err more than half a
ton in a parcel, so that as to the ore sold on December 24, ticketed for as 14 tons, only
weighing off 11 tons 1 cwt., there is a fair subject for enquiry—3 tons error in a 14 ton
parcel is unusual. The accuracy of the estimate (11 tons) for the ore sold on Feb. 25
will not be known to the general body of shareholders until the meeting in May.
Should the discrepancy be as great as in the former parcel there will be less than 70%
(instead of 85%) to come to credit.

SHARE DEALING.—We never interfere in the sale or purchase of shares; neither do we
recommend any particular mine for investment or speculation, or broker through
whom business should be transacted. The addresses of most of the latter appear in
our advertising columns.

SHARE DEALING.—Mr. H. Weekes and Mr. Alex. Walker should write to the Chairman
of the Mining Exchange, Spread Eagle-court, Finch-lane, E.C.

•• With this week's Journal we give a SUPPLEMENTAL SHEET, which
contains—Mining in Australasia: the Monthly Summary, and Reports
from Mines; on the Modes of Travelling in and out of Mines;
Prevention of Steam-boiler Explosions; Gold Amalgamating Machi-
nery (with illustration); Manufacture of Gas; Pumping Machinery;
Treating Waste Mineral Products; Safety Guard for Mine Shafts;
Preventing Incrustation in Steam-boilers; Improved Chilian Mill;
Steel Tubes by Cold Drawing, &c.

•• With the Journal of March 5 was published a SUPPLEMENT, which
contained—A Plan of the Cape Cornwall St. Just United Mining Dis-
trict; the Geological Society of London; the London Association of
Foremen Engineers; Precipitation of Copper; Lining Iron Tubes;
Solid Metal Tubing; Perfection of the Printing Telegraph; Master-
pieces of Industrial Art and Sculpture; the Industrial Resources of
the Tyne, Wear, and Tees Districts; the Useful Metals and their
Alloys; Our First Iron Shipbuilder; Blasting by Electricity; Im-
provements in Pumping Machinery (with Engraving); Treating
Mineral Oils; Tin-Plates; Treating Ores in Colorado; Reports from
Foreign Mines, &c.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, MARCH 19, 1864.

REPORT ON CORNWALL AND DEVONSHIRE.

[FROM OUR TRURO CORRESPONDENT.]

MARCH 16.—Upwards of four years ago I announced to your readers
the stoppage of Old Wheal Vor, 323 fathoms deep from surface, on which
occasion I gave a detailed description of that wonderful mine, the richest tin
mine ever known in Cornwall, a mine which gave returns and profits never
since equalled, even by Dolcoath, with tin at half the price it had then re-
cently been. I stated that under the conditions of price that Old Wheal
Vor gave princely profits, no tin mine then working in the county could pay
its cost; and that, in fact, we felt it difficult at the present day to conceive
such a mine. But, although Old Wheal Vor proper was then abandoned,
the working of WHEEL METAL, in the same set on parallel lodes, was
continued under the name of Wheal Vor. Throughout the working of the
old mine I pointed out that Wheal Metal had proved a capital concern,
having, since its commencement in 1853 up to the time I wrote, returned
94,605¹/₂ worth of tin, out of a very small piece of ground; and in one month
having returned 4000¹/₂ worth of tin, at a cost of 1000¹/₂, leaving 3000¹/₂ profit.
But I also pointed out that it never, up to that time, had had fair play.
My words were—"I am sorry to say that this really good little mine has
all along been most unfairly and improperly sacrificed to bolster up the old
mine. As fast as opened up, the ground was taken away any how, and,
of course, the result is that the mine is worked poor. Still it is a very pro-
mising concern, and if properly opened out, is likely to make a really good
and lasting mine." I am happy to say that this view has been more than
borne out, and that at Wheal Metal, working under the name of Wheal
Vor, there is at present opening out the richest run of tin ground seen in
Cornwall for very many years—such a run of rich ground as cannot, in fact,
be paralleled by any other mine in the county since I have known it. For
nearly 80 fathoms in length, from Metal shaft to west of Ivey's shaft, there
seems to be a continued run of tin ground opening out in the bottom of the
mine. Ivey's shaft, sinking under the 147, under the slide, is worth 1 ton
of tin per fm., and all the way down, from 2 fms. above the 147, there has
been a splendid lode (worth in places 200¹/₂ per fm.), except where the lode
has been disordered by the slide. The 147 east is worth 248¹/₂ per fathom,
and the levels driving west from Metal shaft are also in a splendid lode.
Such courses of tin, extending over such a length, have certainly not been
seen for a long time; and if the mine should, for any length of time, con-
tinue to open up as it is now doing, we shall have again in Cornwall an-
other Wheal Vor, not merely in name, but in fact.

Of course such a discovery has created a great sensation in the district, and
very justly so. For tin production this Wheal Vor district has never been,
in my opinion, surpassed by any in Cornwall; and I have more than once
expressed my opinion that it may yet fairly be expected to do as much as
it has ever done—more it cannot be expected to do. I do not doubt
that this discovery in Wheal Metal will soon be followed by others in the
adjoining mines of GREAT FORTUNE, SITHNEY CARMEL, and SITHNEY
METAL. The latter mine especially, from being almost wholly unknown,
has sprung into immense favour, which is certainly well justified by its
position with respect to Wheal Metal, as it joins it quite close—indeed, they
were both formerly worked as one mine. Fine courses of tin have been
found in Wheal Metal within a very few fathoms of Sithney boundary, and
the 172 east, now driving towards it, is worth 120¹/₂ per fathom.

As I now write under pressure for time, I must postpone a more par-
ticular description of these mines until next week; I think I shall then be
able to give them an interesting chapter in the history of Cornish mining.

REPORT FROM NORTHUMBERLAND AND DURHAM.

MARCH 17.—The Coal and Iron Trades continue, on the whole, very
good, there being an excellent demand for most descriptions of coal and
coke, and also for iron of all descriptions. The effect produced by the
late trials of various Steam Coals by Government officials can hardly fail
to be beneficial to the sale of Hartley steam coal. Now that the reports
have been officially made public, the excellent quality of those coals for
general steam purposes are notorious, and their suitability for use, in at
least equal proportions with Welsh steam coal, is also fully established.
Looking at all the good qualities of this coal brought out by this important
trial, the effect cannot fail of being highly favourable to the character of
the Hartley coal. At many of the collieries here there was the usual
yearly hirings on Saturday last; some, indeed, took place on the previous
Saturday, and it is satisfactory to state that in most cases a very good feel-
ing existed between the parties, the yearly agreement being entered into
with little reluctance on the part of the men. In some cases a slight ad-
vance of prices has taken place, but this is not general. On Saturday week
from 400 to 500 men were thus hired at the Haswell Colliery, and on
Saturday last the usual yearly agreement was entered into at various other
collieries on the Wear and Tyne.

The dispute at the Ravensworth Colliery has been satisfactorily adjusted,
most of the men having returned to work. This is an old-established col-
liery, and the owner has always borne an excellent character, his kindness
to all the men in his employment being remarkable. The men also, as a
body, are among the most respectable of the miners of the North, many
of them having been employed on the works no less than 50 years, having
reached the age of 60 and upwards, and having been employed at this col-
liery the whole of their lives. It is, therefore, most gratifying that an un-
derstanding has so quickly been arrived at in this case. A large quantity
of excellent house coal has been produced at this colliery, and also gas
coal, and at present, in addition to those sorts of coal, a considerable quan-
tity of steam coal is produced. The enterprising owner, Mr. Bardon, has
also purchased a mill on the Team River, a short distance from the coal
works, where he is now preparing machinery for the purpose of manufac-

turing pulp from wood and other vegetable substances, to be used in paper
manufacture, he having secured a patent for his process. These works
are expected to be extensive, and will, therefore, employ a considerable
number of hands.

REPORT FROM MONMOUTH AND SOUTH WALES.

MARCH 17.—The ironmasters of the district are, upon the whole, mo-
derately well supplied with orders, especially the first-class makers. The
increased firmness in the Scotch pig market, and other circumstances, give
strong hope that a good trade will be done in the spring. Rumours have
been afloat that operations at the Hirwain Works have been brought to a
standstill, in consequence of a dispute with Mr. Crawshaw as to a piece of
land, but the report, it is gratifying to state, turns out to be incorrect.
The agitation among the men for a further increase in wages is gradually
decreasing in some parts of the district. Tin-plates are in average re-
quest, but the market is not so brisk as was the case six or seven weeks
ago. At Cardiff, Newport, and the other ports of the Channel, the ship-
ments of coal, more particularly steam, are large, and there is an active
demand. The colliers have worked more regularly of late, and there is
less talk of turn-outs to enforce compliance with unreasonable demands.
The current quotations are obtained without difficulty, and a fair profit is
being realised in every branch of the trade. There is a considerable di-
versity of opinion in reference to the official report of the experiments at
Keyham, but it is pretty generally agreed that it will not affect the Welsh
coal trade much one way or the other.

On Friday, the first meeting of creditors in re D. Thomas (late of Trevelin), Tony-
refall, colliery agent, was held at the Bristol Bankruptcy Court. Assignees were chosen,
and Messrs. Abbot, Lucas, and Leonard were appointed their solicitors.
The iron barque *Oliver Cromwell* has just been launched at the yard of Messrs. Nevill
and Co., Llanelly. This is the second iron vessel built at this yard, and the rapidly-
rising port of Llanelly promises to become at no distant date an important place for
iron shipbuilding.

The Monmouthshire Railway and Canal Company half-yearly meeting was held at
the offices, Newport, on Wednesday, Lord Tredegar in the chair. The directors' re-
port stated that the receipts for the half-year ending Dec. 31 last amounted to £55,544¹/₂, against
£15,797¹/₂ in the corresponding half-year. The net earnings were £35,190¹/₂, against £1,592¹/₂.
In the corresponding half-year. A sum of £4500¹/₂ had been transferred from the revenue
to the reserve fund, in order to meet liabilities in respect of Cwmbran accident, sidings,
&c. New engines had been ordered, in consequence of the rapidly-increasing traffic,
and the rolling-stock was reported to be in good order. The directors had determined to
oppose the Breen and Merthyr Tydvil Junction bill, No. 3, as the powers asked for
were unusual, and inimical to the interests of the company. The report was unanim-
ously adopted, and a dividend at the rate of 6 per cent. per annum, less income tax,
was declared for the half-year, leaving a balance of 110¹/₂ 0s. 6d. to be carried forward to
the next half-year's account. Mr. Cartwright urged upon the directors the importance
of securing the Sirhowy line, as it would give them direct access to a vast coal field.
He congratulated the shareholders on the improved prospects of the company.—Mr.
Bacheor endorsed Mr. Cartwright's remarks as regards the Sirhowy, and expressed a
hope that something would be done to make their investment in the Newport Dock a
little more profitable.—Mr. J. Lawrence and Mr. Bacheor suggested certain alterations
in the mode of preparing the accounts.—The Chairman, Mr. Bailey, and Mr. William
Jenkins explained that the directors had had several interviews with Mr. Forster, but
the price asked for the Sirhowy was too high. They were still willing, however, to
make another effort to secure the property. The usual vote of thanks brought the pro-
ceedings to a close.

The Great Western Company have been advertising for tenders for large clean coal,
the total quantity required being 3600 tons per week. The tenders were to be sent in
by Wednesday last, and several of the South Wales colliery proprietors are trying for
the contract.

In the case *Batchelor Brothers v. the Marquis of Bute's trustees*, the arbitrator (Sir
Thomas Phillips) has just made his award. The damages were laid at £5,500¹/₂, and each
party attended the arbitration by counsel throughout. Sir Thomas Phillips
has decided that Messrs. Batchelor Brothers are entitled to receive either 300¹/₂ or 200¹/₂,
or nothing, as the Court of Queen's Bench may decide, a point of law being reserved, and
each party to pay his own costs. It is reported that an attempt will be made to lay
aside the arbitration, as it is stated that when the case was referred the defendants ad-
mitted their liability, but not to the extent claimed by the plaintiffs.

Satisfactory arrangements have been entered into between the Llanelly Harbour Trust
and the Llanelly Railway and Dock Company, in reference to the Harbour Improvement
Bill, now in Parliament, and it is expected the bill will pass without further opposition.
The consideration of the bill for the proposed new docks, &c., at Cardiff, has been ad-
journing until after Easter by the Lords' Committee. The Board of Trade has reported
against the scheme, and in favour of the objections urged by the Newport Town Council
and Harbour Commissioners, and a determined opposition will be made to the bill, as far
as it affects the Penarth anchorage.

Mr. Thomas Williams, one of the new proprietors of Penryn Works, has just been
presented with a gold hunting lever watch, a gold medal, and an address by the in-
habitants of Treycynon, Aberdare, &c., on his leaving for Penryn. Mr. Williams, as
well as his partner, Mr. Davies, are gentlemen highly respected in the neighbourhood,
and unusual interest is felt by all classes in their success at Penryn.

Rees's safety-lamp, the invention of a Merthyr miner, is now undergoing a practical
trial at several collieries, and the result will be duly reported.
The arrivals at Swansea include—32 tons of iron ore from Chorbrough, for the Dowlais
Iron Company; Dorsetshire from Guayacan, with 61 tons of cobalt ore, for Messrs.
Henry Bath and Son; Emily from Lisbon, with 70 tons of copper ore, for Messrs.
Knowles and Foster, London; Chloris from Almeria, with 272 tons of copper ore, for
Messrs. Elford and Co.; Cambria from Catania, with 170 tons of sulphur, for Mr. Sutton.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

MARCH 17.—There is no decided change as yet in the aspect of the Iron
Trade in the two districts of this county. Pig-iron is cheaper, and makers
are becoming rather more anxious to sell. Coal is a shade cheaper, and
must come down as the weather gets warmer. The manufacturing trades
of South Staffordshire are pretty good, except the heavier kinds, the de-
mand for which is checked by the expectation of a reduction in the price
of iron. The South Wales ironmasters are sending best sheets to South
Staffordshire, for the use of jappanners, to an increased extent, which is a
feature in the trade worth notice.

At the Crewe Works of the London and North-Western Railway Com-
pany the puddlers have been on strike for some weeks, but are about to
recommence work, the company's agents having in the main granted their
demands. The new works for making Bessemer steel there are in a for-
ward state, and the town is rapidly increasing in population.

The enquiry into the deaths of the 12 persons who lost their lives by the
bursting of a boiler at Hole End, near West Bromwich, was resumed yester-
day, before Mr. Hooper, coroner. The evidence given was of a some-
what extraordinary nature. The boiler which exploded was worked by
the heat from puddling-furnaces. It was at the time in charge of William Bagnall,
the engineman, who, it was clear, habitually neglected his work to go drinking, and was
tipsy at this very time. It was known that the water was very low in the boiler before
he went, and the whistle was sounding loudly. When he came he went on the boiler,
and the whistle stopped, and the jury suggested that it must have been gagged. The
enquiry was adjourned.

The Assizes which were terminated at Staffordshire yesterday presented
three cases of considerable interest in connection with mining operations.
In the first case, which has been twice adjourned, George and John Oates were indicted
for having stolen 4945 tons of coal from beneath the church and churchyard at Darlaston.
George Oates had been in partnership with his father and his brother, and John Oates
had acted as doggy in a mine adjoining the churchyard. Latterly George Oates had
worked mines on his own account. It was clearly proved that the prisoners had
worked under the church and churchyard to the extent named, and that they had tried
to conceal their workings by closing the gate-roads; and also that, prior to working under
that property, they had been told that they were up to their boundary. They had left
unusually large pillars, with a view, apparently, to avoid causing subsidence, which
would have at once led to detection. The defence was mainly of a technical character.
Lord Crewe was the Lord of the Manor, and the church and churchyard were built on
the waste granted by him, and it was argued that he had no title. The question was
reserved by Baron Platt for the Court of Criminal Appeal, but the prisoners were found
guilty, and sentenced to two years' imprisonment each, his lordship strongly censuring
the systematic course of plunder which they had pursued. The prisoners, pending the
appeal, were liberated on heavy bail. It is to be hoped that this sentence will check the
practice of subterranean theft, which is too common.

Two cases were tried in the Civil Court, before Mr. Justice Keating, in
which several points of importance to miners are involved. In the first,
Roberts and Yardley v. Rose, the plaintiffs leased a colliery in the parish of Wednesbury
from Sir Horace St. Paul, and obtained from his agent a written permission to make a wa-
ter-course across an adjoining colliery, which a year after was leased to defendant,
who himself also used the water-course. Defendant's lease included the mines and the
spoil banks, the agricultural surface being let to a Mr. Lowe, who gave his consent to the
water-course going across his land. The water-course crossed one of the spoil banks
which were included in defendant's occupancy, and he demanded 10¹/₂ a year for per-
mission for its continuance, but plaintiffs appear to have supposed that the lease of the
owner's agent gave them authority to continue the water-course. It was, however, held
in the Court of Exchequer, where a demurrer was argued, that a license to make a water-
course across any land, except when given by deed under seal, was recoverable at any
moment, and that the owner had revoked the licenses to plaintiffs by leasing the spoil
banks to the defendant, and defendant having revoked his license by a notice, was entitled,
as he did, to stop the water-course, thereby throwing the water into plaintiffs' mines, and
causing damage to the extent of about 355¹/₂, besides causing them to seek for another
outlet for their water, for which they had to pay 20¹/₂ a year. But the Court held that
it was a question for a jury whether the stoppage was done in a reasonable manner, so
as to avoid causing plaintiffs more inconvenience than was necessary, and this was
the issue tried. It was contended by the plaintiffs, that had the stream been stopped
lower down the water could have easily been conveyed across the brick-yard of Mr.
Lowe and into the road, and defendant proved that Mr. Lowe had never con-
sented to this, and that the local board, who had jurisdiction over the road, said they
would not allow it, and that it would in that case have gone into other mines, the jury
found for plaintiffs. Damages 175¹/₂.

In another case the Chatterley Colliery Company, who worked an ironstone mine near
Tunstall, in South Staffordshire, worked in the deeps of a mine worked by Messrs. Wil-
liamson Brothers, extensive ironmasters and mine owners, had their workings drowned
out in August, 1860, and this they attributed to the Messrs. Williamson having sent in
water on them. This case was argued on two demurrers in the Court of Common Pleas,
and it was laid down that the owner in the crop was not liable for any damage done by
water flowing by gravitation from his mines to those of an owner in the deep, even when
the water flowed through cuttings from one seam to another, made for mining purposes
by the former, and the only remedy for the owner in the deeps was to have a barrier;
but it was held that where the owner in the crop raised water by pumping, or other-

wise, above its natural level, and that such water was afterwards discharged and reached the mines of the deep, the former was responsible for the damage. In this case Messrs. Williamson pumped water into a "creek," or subterranean drain. They alleged it was subsequently pumped to the surface in another shaft, and this was the question; but the jury found for the plaintiff. Damages, 250*l*. This case occupied more than two days.

REPORT FROM DERBYSHIRE, YORKSHIRE, AND LANCASHIRE.

MARCH 17.—The Iron Trade still continues in a state of activity, and the reports from the different districts are highly encouraging. For bars and plates there is a good demand, and we have an active enquiry for railway iron. Merchants are giving out orders freely, and there is a fair prospect of a good trade for some time to come. The two competing railway schemes from Sheffield to Chesterfield, and from Sheffield into Staffordshire, have been before a committee of the House of Commons this week, and a great number of witnesses were examined in favour of each scheme, but the prevailing opinion is that the Midland, Sheffield, and Chesterfield line will be granted. It will open out a large tract of mineral country, and will be a great benefit to the coal and iron trade of the district. Another Act, which would have placed a large tax upon the coal and iron trade, has been introduced into the House of Commons, and is now being considered. The demand for inland coal for the London market is active, and there are no indications of much abatement, judging from what is being required for the new furnaces in the Cleveland and Durham districts. The threatened dispute between the masters and men is not a probable settlement. Between 3000 and 4000 men will thus be thrown out of employment, and the consequences to them and their families will be very serious should the lock-out be a protracted one.

A most remarkable accident occurred on Tuesday afternoon at one of the ironstone pits belonging to Mr. R. Barrow, at Hady, near Chesterfield. Some water in the workings of an adjoining mine rushed into the levels of Mr. Barrow's pit, and inundated it with water. Many of the men got out by a heading which was driven to the rise, but 12 men and boys were left in the pit. The greatest excitement prevailed, and everybody believed that all the parties in the pit had perished, either from water or from choke-damp. Mr. Seymour, the resident viewer, was soon on the spot, and gave directions for the drawing out of the water by tubs from the drawing-shaft, which was done, and this, with the water raised by the pumps, discharged a volume of about 600 gallons per minute. Mr. Hesley, the Government Inspector, was also on the spot, and, through the kindness of Mr. Hesley, the Government Inspector, was not required to exercise his official duties, he kindly came down from London, and never left the scene of the accident until the workmen had been rescued. Mr. Barrow was also present. After the water had been lowered about 20 in. below the level of the arch a party of men went to explore the workings up to their neck in water, and amongst them was Mr. R. G. Coke, the mining engineer, who, with the workmen of the pit, and several men, rescued 8 of the 12 whom it was supposed had been drowned or suffocated. They found all the men well, with lighted candles, and they were carried to the surface, and brought to the bank amidst the ringing cheers of the crowd who were in the vicinity of the pit. They had been closed in the pit nearly 36 hours, without food or drink. The poor fellows, when they were brought out, looked very wretched and cold, but there were stimulants and warm clothing provided for them, and after they had had their clothing changed, they were sent to their homes in cabs. The pumping was continued on Thursday, and about noon the four remaining persons were safely extricated, amidst the joyful exclamations of an assembled crowd. The accident is attributed to the owner of an adjoining mine having set his engine down, by which a large quantity of water had accumulated, and burst into Mr. Barrow's pit.

A new colliery is about to be started on Mr. Masters' estate, calculated to produce 1000 tons of coal per day. A joint-stock company is being formed for working a large ironworks in Yorkshire.

The applications for Letters Patent include—Mr. F. Wilkinson and Wm. Rosseter, Accrington, for machinery for carding cotton and other fibrous substances; Mr. W. R. Bowditch, of St. Andrew's, Wakefield, for regulating the flow of gas in railway and other carriages, and in apparatus employed to regulate the flow of gas in such railway and other carriages, part of which improvements being applicable to the regulation of gas supplied to stationary lights; Mr. W. Cockshott, Keighley, for driving the spindles of spinning-machines; Mr. J. Crofton, Britannia Foundry, for washing and wringing and mangling-machines (parts of which improvements are also applicable to agricultural and other purposes); Mr. H. Fletcher, Siddalls-road, Derby, for a new compound used for varnishing paper hangings and other articles; Messrs. H. Eastwood and H. Matthews, Eiland, York, for machinery or apparatus for carding wool or other fibrous substances.

FOREIGN MINING AND METALLURGY.

From Belgium we learn that a royal decree, just issued, approves the statutes of the Centre of Gilly Colliery Company. At Charleroi a fresh rise has been noted in refining pig, and the Châtillon Company has concluded some contracts at 3*l*. 10*s*. per ton, although it should be stated that it has done more business at 3*l*. 8*s*. per ton. The movement in iron is also becoming general; thus the Couillet Company has just made an advance of 4*s*. per ton by carrying its tariff to the following rates:—First class, No. 1, 7*l*.; No. 2, 7*l*. 12*s*.; No. 3, 8*l*. 4*s*.; and No. 4, 8*l*. 16*s*. per ton. Plates are at the same time in considerable demand, and the Couillet Company has carried them to 10*l*. 10*s*. 16*s*. and 11*l*. 12*s*. per ton. Large orders come to hand from abroad, the new rolling-works of M. Victor Gilleux at Cile having obtained a contract for 1000 tons on German account. Rails are much sought after, and foremasters show themselves more and more "difficult" in respect to the price of the product being required, a long time to come; the average price is 7*l*. per ton. In Belgium, as in England, a difference is remarked in the tariff for iron of the large and small works, these latter confining their transactions to the interior, where they have to sustain an active competition, and make concessions which establishments dealing with foreign countries do not grant. One of the best results of the present revival in business is expected to be the accumulating Belgian metallurgists to work on export account; the competition which has prevailed on the home market is, consequently, expected to become less keen, and the general tone of business will be considerably benefited. The preceding observations have had more special reference to the Charleroi market, but we may note that at Liège ordinary qualities of refining pig are quoted at 3*l*. 2*s*. to 3*l*. 4*s*. per ton; on the same market, rolled irons are worth 7*l*. 4*s*. per ton for No. 1, 7*l*. 16*s*. per ton for No. 2, and 8*l*. 8*s*. per ton for No. 3. The foremasters firmly insist on the suppression of any guarantee clause in all contracts which are now being concluded for rails on export account. The current of affairs with the United States, and also with England, continues active for rails and various other qualities of iron. One of the blast-furnaces of the Houppes-sur-Sambre establishment is about to be re-lighted, with a view to the production of tender refining pig, and it is expected that the other furnaces belonging to the same undertaking will also be shortly again in operation. The Thy-le-Château Company is about to construct a blast-furnace at Charleroi. M. Dupont is about to devote to the production of refining pig a blast-furnace previously applied to the fabrication of casting pig. In the shares of the principal Belgian metallurgical establishments rather more animation has been remarked of late. The establishments for the fabrication of zinc, which have hitherto suffered much from the effects of competition, now appear to have entered upon a more encouraging period. The working of calamine mines in Silesia has lost much of its importance, and the Belgian zinc market exhibits more activity. In fact, an advance in this metal has made considerable progress during the last few months. An association formed some time since among the colliery proprietors of the Lower Sambre has contributed in no small degree to improve the position of ordinary coal, the price of which has risen sensibly. The delicate position of several French industries, which are obliged to reduce their expenses of production by all possible means, has more and more directed the attention of French manufacturers to the duties which still burden and increase the price of combustibles. "Coal at a cheap rate"—at the cheapest possible rate—becomes more and more the rallying cry of all the French industrial centres. Numerous petitions have been circulated soliciting some free importation of coal, and others the purchase of canals; and it is believed that the Government of the Emperor will, in some shape or another, not prove itself deaf to these appeals. Its active and continual solicitude for the wants of French industry, which it has proved of late by spontaneously reducing the import duties on coal, will, no doubt, induce it to take measures capable of exerting an efficacious action on the price of coal. The first measure calculated to attain this object is evidently the purchase of the navigable ways which unite Charleroi to Paris, since this operation would involve an average saving of 2*s*. per ton to French industries and manufacturers consuming Charleroi coal. Prices in the Franco-Belgian coal districts have exhibited a tendency to a fall of late, with the exception of some working centres where local consumption has enabled previous rates to be maintained. The prices of the Pas-de-Calais, the Nord, the Centre of Belgium, the Lower Sambre, and Liège, all display this tendency; on the other hand, a certain firmness is remarked in the Ruhr workings.

On the whole, the improvements noticed recently in the French market is sustained, and orders have come to hand a little more freely. Refining pig has changed hands at 4*l*. 16*s*. per ton, but the transactions reported are among the consumers of the department of the Haute-Marne, foreign buyers having failed to come forward; indeed, it is affirmed that pig displays a tendency to leave the St. Dizier group less and less. Thus, the Châtillon district and Paris limit their purchases to insignificant quantities, as compared with those which they formerly took off; the Moselle seeks scarcely anything in the St. Dizier group, and brings to it almost as much as it takes from it; and the deliveries for the South of France have also lost much of their importance. At a by no means remote period it is anticipated that all the St. Dizier pig will have to be consumed in the locality in which it is produced, and the reference to the rolling-mills will, it is said, enable this to be effected without difficulty. Irons continue to be placed as fast as they are produced, and some works have orders for fifteen days or a month in advance. Prices do not improve, but remain at 9*l*. to 9*l*. 4*s*. per ton for rolled, and 10*l*. 8*s*. to 10*l*. 12*s*. per ton for beaten iron. In the present state of affairs the St. Dizier works could probably raise quotations, were it not for the offers of the Moselle. The two groups of the Champagne and the Moselle find themselves, however, almost everywhere in each other's way, and this is a very unprofitable competition arises a lowness of prices which is very extraordinary, having reference to the rise which maintains itself in England, and appears to be still proceeding in Belgium. Some tolerable orders have been received for machine iron, and producers have generally some engagements on hand; its price is very firm, at 9*l*. 8*s*. to 9*l*. 12*s*. per ton for No. 20 and upwards. The iron wire establishments are exceedingly well supplied with orders. Arrangements have been nearly concluded in France for the formation of a vast establishment of credit, specially devoted to industrial operations, under the title of the Société Générale de Commerce et d'Industrie. The capital of the new company is fixed at 4,000,000*l*. which, it is expected, will prove sufficient to enable it to undertake the operations which it proposes to itself. An extension of mining and metallurgical affairs in France will enter in a considerable degree into the programme of the company, which has the patronage of such eminent names as Schneider, Talabot, and Bartholomy. The fixing of the capital of this great enterprise at 4,000,000*l*. has awakened the attention of the famous Crédit Mobilier, which does not wish to be outdone by the new establishment in the matter of capital. The Crédit Mobilier has, then, solicited from the Government power to increase its share capital from 2,400,000*l*. to 4,000,000*l*. The Crédit Mobilier is said to be also bent on giving an impulse to the working of coal in France, two or three considerable mining affairs having been the object of serious examination of late on the part of the committee of administration. M. Méne has sent to the Academy of Sciences a memoir on a chemical examination of a puddling-furnace. Puddling he defines to be nothing else than the decarburization of pig, and the conversion of the product into ductile iron. The operation consists generally in the melting of pig on the sole plate of a reverberating furnace, and bringing it in contact with flame in the midst of scoria until it has lost its carbon, after which balls of the refined iron are formed, and submitted to the action of compressing an

stretching apparatus. Messrs. Calvert and Johnson, of London, made, in 1855, some special studies on the different phases of puddling; and a remarkable work, inserted in the *Moniteur Scientifique*, by Dr. Queneville, demonstrates the discovery in the scoria of the silica, phosphorus, and sulphur, which originally existed in the pig, and argues that it is by the progressive labour of the workman that these matters tend to separate themselves in proportion as the refining process advances towards completion. M. Méne having had occasion to undertake an analogous work for the Vienne metallurgical establishments in the department of the Isère, gave in his memoir some conclusions arrived at in some points of view from the data of the English chemists. It appears that he followed the work of a puddling furnace in all its phases, having submitted to a minute analysis every five minutes numerous samples withdrawn from it; and his conclusions are as follows:—First, with reference to the carbon and the conversion of the pig into iron, that the decarburizing action is produced by the oxygen of the scoria at the moment of the fusion, and the mixture of the pig with this scoria, since after the refining, carbon (industrially speaking) is no longer found in the products of the fabrication; secondly, with reference to silica, that by the fusion of the pig with the scoria this matter eliminates itself almost entirely from the iron; and thirdly, with reference to the phosphorus and the sulphur, that one cannot be precise about them, only insignificant quantities of these bodies being found. M. Méne adds that, since, according to experience, the conversion of the pig into iron is terminated by the fusion and mixture of the scoria, it is wrong to prolong the work after this phase of the operation, as excessive manipulation only engenders waste.

With respect to profits realised in the past "exercise," we may note that the Paradis, Avroy, and Boverie Collieries Company, at Liège, is paying a dividend of 15*s*. per share in respect of the second half of 1863. The dividend for 1863 of the Marcinelle and Couillet Blast-furnaces, Ironworks, and Collieries Company is fixed at 1*l*. per share. The dividend for 1863 of the United Collieries at Quaregnon is fixed at 10*s*. per share, or 5 per cent. Dividends are also announced by the Antwerp Steamboat Company, the Danube Steam Navigation Company and other more or less important industrial enterprises.

There has been no great activity on the Paris copper market, and prices have fallen. English has made 107*l*.; rough Chilean, 98*l*.; and Corocoro mineral, 102*l*. Since some important sales which took place in the first days of the month at Havre, affairs in Chilean have been almost nil on that market, and the price has remained at 98*l*. The annexed details sum up the movements of the article in February on the Havre market:—Nine tons of Minnesota were sold and delivered at 126*l*. to 128*l*. per ton; the stock from various United States sources of supply being reduced to 103 tons. Some large deliveries having been announced by the last mail from the Southern Seas, as well for France as for England, Chilean has successively fallen from 104*l*. to 101*l*. and even to 99*l*. per ton; this latter price had, however, the effect of directing the attention of speculators to the article, about 400 tons of which had been dealt in for delivery at a future date at 99*l*. to 100*l*. per ton; the total sales of the month were 740 tons. In minerals there have been only few transactions; old copper is removed currently at previously quoted rates. The copper of the Society of Commerce has been quiet and weak, at Amsterdam and Rotterdam, at 58*fl*. The situation has only slightly changed at Hamburg, that market having been thus far very little affected by the reduction of price in England. At Berlin and Cologne affairs have been inactive. The market for tin has experienced scarcely any change; the reports from the principal markets note the execution of small orders, but affairs of any importance continue to make default. At Amsterdam Banca tin remains on the list at 70*fl*.; at this rate 700 to 800 bales have been sold at Rotterdam. Affairs have presented little activity at Paris, Detroit having fallen to 120*l*. Banca to 125*l*. and English to 116*l*. per ton. The market has been feeble at Cologne, as well as at Berlin; at Hamburg for small purchases tin retains previously quoted rates. In consequence of the want of stock in the hands of the Havre houses, transactions in lead have been almost nil, notwithstanding the good position in which this metal is now found. The export of lead commenced from this port, on 20*l*. per ton, has been for a small lot of 20 tons, with the object of Spanish market at 21*l*. per ton. Notwithstanding the little activity which now prevails in the Paris market, lead is very firm, and prices have now risen to 22*l*. 8*s*. for rough French, and 22*l*. 16*s*. for Spanish lead. At Hamburg, soft German lead obtains full rates, the disposable stock being limited. Cologne has been firm, and at Berlin holders display a tendency to advance their terms.

Reference has been made more than once under this head to the dullness of the French metallurgical market as compared with that of England. The consequence is strikingly marked in the curtailment of operations between the two countries as regards the various descriptions of iron. Thus, during December our exports of iron to France show a general decline as compared with December, 1862 and 1861, with the exception of wrought-iron, the movement of which is inconsiderable:—

	Dec. 1861.	Dec. 1862.	Dec. 1863.
Pig-iron	Tons 7761	Tons 14,110	Tons 7584
Bar, angle, &c., iron	1859	1233	1422
Railway iron	2875	954	97
Iron castings	549	618	69
Iron hoops, &c., &c.	479	219	89
Wrought iron	190	163	216
Old iron for re-manufacture	225	328	—
Unwrought steel	349	253	194

When Mr. Cobden concluded his Treaty of Commerce great hopes were entertained that English pig-iron would find extended outlets in France; and so it did in 1862, when 173,143 tons were exported in that direction, against 111,302 tons in 1861; but in 1863 high prices did their work, the economical French soon began to restrict their transactions, and the consumption of English pig in France fell last year to 139,680 tons, still a large amount, but a very considerable quantity, and it is interesting to recall the fact that it is a larger amount than the entire exports of British pig in all directions in 1845 (77,362 tons). It must be admitted, however, as a general fact that the commercial relations between England and France—not only in iron, but also in other commodities—have not thus far experienced that rapid expansion which the supporters of the Treaty of Commerce would fain have had us anticipate.

TRUTH'S ECHOES, OR SAYINGS AND DOINGS IN MINING.

The Mining Share Market has been very active during the past week, and a large amount of business appears to have been transacted. The usual fortnightly account took place on Wednesday, and although more than ordinarily heavy, it would have passed off more satisfactorily had there been an adequate supply of stocks immediately required. This deficiency renders the settlement more protracted than desirable. The market generally has been quiet, and the few new shares which appear to have been active in the daily transactions. Several mines have taken a very important rise, which to present appearances bids fair to be maintained.

WHEAL SETONS have been largely dealt in at advanced rates, and a good demand has taken place for WEST SETONS. In consequence of a reported improvement in the 110 west, but fluctuations have followed.—EAST BASSET and WHEAL BASSET have been dealt in at lower rates.—NANGLE has varied very much, but freely dealt in.—STRAY PARK and CLIFFORD have been in good demand and rather extensively dealt in at improved rates, but the former has been rather weak.—TINCROFT and CALVADON have been engaged for, but do not maintain the advance.—EAST CARADON has been in better request. WHEAL GRENVILLE have been largely dealt in at improved rates.—EAST GRENVILLE have been dealt in at lower prices.—NORTH TREKREIBTS have shared in the transactions of the week, but are not quite so firm.—NORTH DOWNS and NORTH ROSKEAR continue heavy at present quotations.—GREAT WHEAL BUSTS are in good demand, and not being plentiful, likely to advance.—KITTS (St. Agnes) are sought for at buyers' figures.—WHEAL ROSE have changed hands.—WENTWORTH CONSOLS find ready buyers, with a strong tendency to advance.—WEST CHIVERTON, CHIVERTON, CHIVERTON MOON, and NORTH SURPRISE have been largely dealt in during the week, but are quiet lower.—EAST LOVELLS have experienced sudden and unexpected rise, and from present appearances are likely to advance much higher.—BASSET and GYLLS have been dealt in at improved rates.—GREAT WHEAL YONS have been extensively dealt in during the week, and prices have considerably advanced.—SITNEY and CARMEL and GREAT WHEAL FORTUNE shares have been freely engaged for, in consequence of reported improvements in the respective mines.—SITNEY WHEAL METAL is a new adventure, and from the business done, is likely to become a favourite speculation.—PROSPER UNITED and TAYLOR have been in good request, but prices are rather quiet.—MANAGER DOWNS and MARGERY shares are in better demand at improved rates.—PROVIDENCE shares, after a little fluctuation, have been more in request, at better prices.—EAST PROVIDENCE shares have changed hands at nominal rates.—EAST CARADON has fluctuated, but show strong evidence of an advance.

MARKET VALLEY and GONAMENA have been freely dealt in, but show a weaker tendency.—GLASGOW CARADON are offered at lower rates.—LUDCOTT and TRELAWER are in better demand, the latter at firmer prices.—MARY ANNS have been, however, more freely offered.—NEW WHEAL MARTIN have been dealt in at nominal prices.—HARVEST DOWNS and MARK VALLEY rather quiet, but present quotations are not very low.—EAST CARADON are more freely offered.—CHIBBOS have been largely dealt in, attended by some variations in price.—EAST CARADON: Caunter Lode: The 60 east is worth 6*l*. per fathom; the 70 east, 7*l*. per fathom; the 80 east, 25*l*. per fathom; and the 90 east level, 20*l*. per fathom.—New Lode: The 60 east is worth 12*l*. per fathom; and the 70 east, 10*l*. per fathom. On the south lode the 60 east is at present poor; the 70 east is valued at 39*l*. per fathom, and the 70 west, 10*l*. per fathom. The sale of 490 tons, on Thursday, realised 3437*l*. 6*s*.—MARK VALLEY sold 417 tons, making 1171*l*. 17*s*. These sales have not realised as much as was anticipated, in consequence of the decline of the standard.

EAST JANE is represented to have much improved. In taking down the lode for 5 fms. in length, in the 26 south, it averaged 15 ewts. per fm.; the end driving in the western part is yielding 7 cwt. of lead per fathom, and no wall. In the same level north they are driving on the eastern part, and are now about to cross-cut to the western part. In the rise in the back of this level they are carrying 3 cwt. only of the lode, and this is yielding 6 ewts. of lead per fathom. The stopmen are engaged in cutting pit in the 26, preparatory to further sinking the shaft, and when completed increased returns will be made.

GREAT WHEAL BUST.—The prospects of this property are improving as the numerous places of operation are being developed. Rumours prevailed yesterday that an important discovery had been made in the 130 east of Offord's shaft, which have been officially confirmed. The lode at that point is now worth full 50*l*. per fathom, and from general appearances likely to further improve, the ore being of richer quality, and is considered a continuation of the rich course of ore which passed through the winze sinking below the 120. All other places continue to maintain the same value as last noticed. The agents of the lode, and the company have marked out the limits of the Old Hattenbegie sett, which is intended to be worked separately, so that at the approaching special general meeting of Great Wheal Bussy shareholders (which will probably take place this month) the definite arrangements for completing the division will be more readily arrived at.

ST. DAY UNITED MINES.—This extensive property is now beginning to show something of their future prospects, and as the several portions are steadily being developed immense runs of valuable ground are being laid open. The Wheal Unity district is opening up very promising, with several important points to come off, whilst Garby's lode, in the 95 east, has improved, now worth upwards of 30*l*. per fathom. Policies district is also looking remarkably well, and the several lodes which traverse the sett are yielding large and profitable results. Upwards of 10,000*l*. worth of tin has been returned for the four months ending December, whilst the copper and arsenic increase the sales to 10,000*l*. leaving a profit of 1660*l*. for that period. The current four months are expected to considerably improve upon the past.

OKEL TON is represented to be opening out remarkably well, and an extensive run of valuable ore ground has been laid open in the 50 east, which level has been driven 50 fms. through a lode varying from 5 to 10 tons per fathom. The 65 and 80 fm. levels have not yet been extended to the ore gone down from the 50; but the 80 has let down the water from the above levels, in the bottom of which there is a good shoot of ore gone down. When these levels shall have reached the points east, to take the ore gone down, the mine will be in a good profitable position. The 50 end, with the two winzes and two stopes, are yielding, in the aggregate, 80 tons per fathom. The 65 and 80 are also producing large quantities of ore, and now that the operations are affording a monthly profit and with the anticipated improvements from present prospects, they will be

greatly enhanced. The quantity of ore sold during the past two months is given at 302 tons 13 ewts., realising about 1329*l*.

TRELAWER is reported to be looking much better in several important points. The lode in the shaft is more promising, also the end in the 144 east. The lode west of the pump-wins is worth 25*l*. per fm., and a stop in the 144 west is valued at 35*l*. per fm. The 124 east has improved, and bids fair, from present appearances, to further improve. ST. JEW UNITED continues to look remarkably well throughout, and there appears little doubt that it will ultimately become a good paying and permanent mine. JUST CONSOLS: The operations here are progressing most satisfactorily, the Guide lode continuing to produce more tin than the present limited stamping power can get through. Arrangements will shortly be made for the extension of operations and additional machinery, which the present prospects so urgently require.

CAPE CORNWALL.—From a most authentic source I am informed that the last consignment directed their attention to returning copper only, and although the standard was very low, they made large returns; that they cut through several highly productive tin lodes, yet they were not developed, their object being copper.

GREAT WHEAL FORTUNE is represented to have improved in two other important points. In the 102 east, on Carmel lode, they have a very good discovery, but not sufficiently open to give a fair estimate of its value. At the Old Mine they have intersected the lode by the 30 cross-cut, which is looking very promising for both tin and copper. By letters received this morning (Friday) the 102 east has further improved, and the 30, in the O.D. Mine, is opening out exceedingly well.

CALSTOCK CONSOLS.—The main lode of Okei TON runs through the entire length of the mine, to intersect which they have been cross-cutting south from the 50; 112 fms. have been driven, and 50 fms. more is calculated to reach the desired point; the ground is favourable, and highly mineralised. Danescombe lode continues to look very promising, and improving in depth. They have driven the western level 102 fms., and the ground is becoming more congenial, and the lode carrying more ore and blende. The tribute department in the north mine is returning fair quantities of ore.

SITNEY and CARMEL.—The extraordinary discoveries which have been made in Wheal Metal lode, at Great Wheal Vor, has created considerable interest in the progress of the operations in this mine. The position of Sitney and Carmel is most desirable, being situated immediately south of Great Vor and west of Great Fortune. The Wheal Metal lode of the former runs parallel with Sitney and Carmel lodes, whilst the Wheal Metal south lode runs through the entire sett. The rich course of tin found in Great Fortune is within a few fathoms of the boundary. At the shaft on Wheal Metal they had no tin until they got to the 130 fm. level, and then only stones of tin, which corresponds with the 75 in Sitney and Carmel, where they have now tin all the length of the shaft, which is lengthening east to the 95. This shaft will be completed to that point in about a week, where the lode is worth fully 20*l*. per fathom, when they will open east and west on a good tin lode. The flat-rod shaft presents similar features to those in Wheal Vor and Metal; consequently, the prospects which are now presented at this mine fully correspond with the views entertained by the promoters at the period of commencement, and although a long time has elapsed to enable them to reach the present points of operation, there appears to be little doubt of great discoveries being made here before long. It is reported that the lode in the winze is further improved, being now 5 ft. wide, and worth from 28*l*. to 30*l*. per fathom. This is highly encouraging for the 95.

From Mr. J. HUME.—The Mining Market is very active, and eager enquiries are made from all parts of the country for sound mining investments. What can you recommend? Is the daily enquiry. Good improving mines are in request, as matter at what price; many valuable properties are deservedly prominent; others are rising into notice quietly; but amongst these latter mines some are destined to astonish the mining world, and to rival the great discoveries of the past. Amongst these must be noticed SOUTH CORNBURROW. The operations on the West Base lode (a lode with a deposit of rich tin, shallow, but which quickly changes to a copper lode in sinking) give evidence that this mine will most likely be a prize equal to rich neighbour. A gentleman of scientific, as well as practical mining knowledge, writes:—"Capt. Williams informs me he is making fresh discoveries of tin; the lode which came into the engine-shaft, a little above the deep adit, is 1½ ft. wide, and it is broken for about 12 ft. per fathom; good-sized heaps of tinstuff are accumulating on the surface, and in one month from the time we have commenced working, we shall be able to get water stamping power, when we shall at once begin to make profits." This, then, is the commencement, doubtless, of a mine destined, probably, to be one of the foremost of the district. Shares have risen to 1½*g*. and 2*g*. and will, no doubt, go to 3*g*. or higher. GREAT WHEAL FORTUNE: The 102, or bottom of this mine, is again becoming rich, after having partially failed in the 90. Such variations in the productiveness of the lode, in depth as well as in length, accord with the general features of the district. Shares are rising again, and the mine will become as much a favourite as ever—a companion to Great Wheal Vor. Capt. Williams, who has been so long as they have certainly seen their lowest; the mine will be a good one, and will not adverse pet theories. EAST GRENVILLE is neglected, but deserves more attention. MARKET VALLEY is a safe investment—the prospects are good.

From Mr. JAMES CROFTS.—After a course of several months of general property in a particular class of mines, which it is unnecessary to designate by name, those familiar with the business of the Mining Market, a sort of calm has supervened, as a consequence, a slight decline in prices. Enough has, however, been done, in the way of the public becoming large investors to stimulate the introduction of other concerns, based upon the success of their progenitors, the shares in which, whether for ultimate good or evil, find a ready market also. Outside of these particularly lucky concerns, there is now a strong tendency to reascend old, and, in many cases, worn-out, beyond-redeemption, mines, for which very large sums are asked and paid; and never the history of mining has there been such a happy time for promoters, should it be easier to raise a capital of 50,000*l*. upon a mine in the present day than the modest sum of 10,000*l*. upon one fifteen years ago—Devon Great Consols. It would be an inviolable task to analyse particular items of the mass, and perhaps imprudent, if not unjust, as who can say how soon, with ample capital and improved modes of working, a formerly abandoned mine may not prove a prize, whilst in many of these new concerns the chance of such a result is certainly adverse. If a rule can be laid down for the guidance of investors as to the merits of a particular candidate for public favour, it appears to me that the writer of this article is entitled to be considered as a practical exponent—whose report appears in the prospectus, where that is a medium of introduction, the important question being his standing and experience as a practical miner, and freedom from either bias or sinister influences in reporting; at where such qualities are assured, it is only further necessary to look to other new concerns where such guarantees do not exist, and, by these simple cautions alone, the public may increase their capital, instead of losing it altogether.

The dealings in the market are miscellaneous; but the business is in general good. Many improvements are being made, and notably by Great Wheal Vor, where the lode in the shaft is more promising, also the end in the 144 east. The lode west of the pump-wins is worth 25*l*. per fm., and a stop in the 144 west is valued at 35*l*. per fm. The 124 east has improved, and bids fair, from present appearances, to further improve. ST. JEW UNITED continues to look remarkably well throughout, and there appears little doubt that it will ultimately become a good paying and permanent mine. JUST CONSOLS: The operations here are progressing most satisfactorily, the Guide lode continuing to produce more tin than the present limited stamping power can get through. Arrangements will shortly be made for the extension of operations and additional machinery, which the present prospects so urgently require.

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of the above loan, I request you to allot to _____ that amount of bonds, or any part thereof, which _____ agree to accept in conformity with the conditions of the prospectus.

Gentlemen, your obedient servant,

Signature
Address

Date

WEST TREMAYNE TIN AND COPPER MINE.

On the "COST BOOK PRINCIPLE."
In 6400 shares of £1 each. 5s. deposit, and no call to be made at less intervals than three months, or for more than 2s. per share.
This set comprises an extensive and valuable run of mineral ground in the parish of St. Erth, Cornwall, to the west of Tremayne and West Providence Mines, and includes the set of Old Wheal Jewell, which was exceedingly rich in minerals.
The set contains five east and west lodes, and is traversed by the great elvan course that made so productive the celebrated Herland, Relatian, and Rosewarne Mines on the east, and the rich mines of Marazion on the west, which elvan intersects the whole of the lodes, and such intersection has invariably resulted in large deposits of ore.
There is on the mine a 24 in. cylinder engine and boiler, both in good condition, and capable of draining the workings 70 fms. below adit, which is 20 fms. from surface, and in which three of the five lodes have been intersected, and considerable quantities of rich ore raised therefrom.
An engine-shaft has been sunk perpendicularly 20 fms. below adit, making the entire depth of the mine 40 fms. from surface, and from the very valuable nature of the lode at that point (yielding over 2 tons of ore per fm.) it is confidently believed that more extensive explorations will result in laying open a copper mine of great value.
To parties desirous of embarking in a bona fide mining undertaking, without premium, possessing such prospects of early profits at comparatively little cost, the present affords an opportunity rarely to be met with.
Application for shares to be made to Mr. JOHN HITCHINS, St. Michael's House, St. Michael's-alley, Cornhill, London, who will supply every information from his own inspection; to Mr. C. R. FARRAR, Hayle; or to Capt. W. W. MARTIN, Gurny Mine, near Marazion, Cornwall.

THE CUMBERLAND CONSOLIDATED LEAD AND COPPER MINING COMPANY (LIMITED).
Incorporated under "The Companies Act," which strictly limits the liability of each shareholder to the amount of his subscription.
Capital £60,000, in 12,000 shares of £5 each; with power to increase.
Deposit 10s. per share on application, and £1 10s. on allotment. Future calls not to exceed 20s. per share, and not to be made at less intervals than three months.
CONSULTING ENGINEER—Evan Hopkins, Esq., C.E., F.G.S.
BANKERS—The Imperial Bank, Lombard.
SOLICITORS—Messrs. Howard, Dillman, and Lowther, 141, Fenchurch-street.
BROKER—Alex. Morton, Esq., 11, Angel-court.
OFFICES—27, BUCKLEBURY.

The object of this company is to work more extensively some valuable mineral properties in the county of Cumberland, which have been lately inspected by Mr. Evan Hopkins, C.E., and also by Mr. Josiah Hitchins, consulting engineer of the Devon Great Consols, whose reports are of a highly favourable character, not only as to the quality, but also as to the quantity of the lead, copper, and other ores.
The locality is very convenient for increasing the water-power required for large operations, and there are good roads for the transport of the product to market; and while possessing an adjacent shipping port, the construction of a railway about to be commenced, to connect Calbeck and Hesketh New Market, with Aspatria on the Maryport and Carlisle Railway, will reduce the cost of carriage, and increase the present facilities of communication.
Seeing the large quantity of ore already laid open, and the good prospects of the various lodes, the directors consider that they have every reason to expect a produce sufficient to leave a steady and permanent profit of from 15 to 25 per cent. per annum on the capital employed.
Specimens of the various classes of ore brought from the mines by Mr. Hopkins, sections of the workings, and the engineers' report, may be inspected at the offices of the company, and all further particulars may be obtained from the secretary.
Applications for shares may be addressed to the bankers, the broker, or to the secretary at the offices of the company, where full prospectuses and forms of application may be obtained.

THE DEVON CONSOLS TIN MINING COMPANY (LIMITED).

Capital, £15,000, in 15,000 shares of £1 each.
Deposit, 10s. on application, and 10s. on allotment.
Incorporated under the Companies Act, 1862, whereby the liability of each shareholder is specially limited to the amount of his shares.
THOMAS BRADSHAW, Esq., Hampton Court.
JAMES BRAID, Esq., M.D., Director of Les Grandes Mines Consolidées de Villenagie (Limited).
WILLIAM CREMER, Esq., Director of the Terrieo Copper Mining Company.
J. O. MARON, Esq., Director of the London, Birmingham, and South Staffordshire Banking Company (Limited).
B. L. PHILLIPS, Esq., Director of the European Bank (Limited).
GEORGE VESSEY, Esq., Director of Les Grandes Mines Consolidées de Villenagie (Limited).
Lieut.-Col. WEMYSS, Director of the Havan Silver-Lead Mining Company (Limited).
BANKERS—London and County Bank.
BROKERS—Messrs. Smith and Binney, 5, Angel-court.
CONSULTING ENGINEER—Josiah Hugo Hitchins, Esq.
SOLICITORS—Messrs. James Taylor, Mason, and Taylor, 15, Furnival's Inn, London.
SECRETARY (pro tem.)—Thomas Spillman, Esq.
OFFICES—8, LANCASTER PLACE, STRAND, W.C.

PROSPECTUS.
This company is formed for working the extensive tin mines situated on the south-eastern mountainous ranges of Dartmoor, comprising extensive limits. The leases are held under the Prince of Wales and Lord Churston for 21 years from 1863, subject to the payment of 1-18th duty only.
The various lodes contained in the property now to be transferred to the company are those of the well-known Batchelor's Hall, White Works, Nun's Cross, and Ailsborough Tin Mines, which may confidently be expected to yield unusual profits, judging from the rich tin ore which is now seen in the lower levels; these are, doubtless, some of the once very productive tin mines of Dartmoor, which are yet to be rendered more profitably productive by employing capital, skill, and energy to open them out deeper. This will be done, seeing the great success that has attended the deeper working of the Old Birch Tor and Viller Mines, which promise before long to rank amongst the most profitable tin mines of Devon and Cornwall.
It would be here out of place and unnecessary to enter into minute details to form a correct opinion of the value of this mine, as the able report of Mr. Josiah Hugo Hitchins, the consulting mining engineer to the Great Devon Consols, is sufficiently conclusive to justify the directors in recommending this mine as a safe and very valuable investment.
The present owners of the mine having expended a large sum of money in putting the machinery in proper working order, and clearing many of the old levels, the directors have made most satisfactory arrangements with them for the transfer to the company of the property, machinery, and leases, for the sum of £5000, the whole of which is to be taken in fully paid-up shares.
Prospectuses, with reports, can be had at the offices of the company, or the brokers.
Applications for shares must be made to the directors on or before Thursday, the 24th inst., accompanied with the banker's receipt for the deposit of 10s. per share, in the accompanying form.—March 12, 1864.

FORM OF APPLICATION FOR SHARES.
To the Directors of the Devon Consols Tin Mining Company (Limited).
GENTLEMEN,—Having paid to the London and County Bank the sum of £ , being a deposit of 10s. per share on shares in the above company, I request that you will allot me that number of shares of £1 each in the said company, and I hereby undertake to accept the same, or any lesser number which you may allow to me, and to pay the further deposit of 10s. per share on allotment, and request you to place my name on the register of shareholders, in respect of the shares allotted to me.
Name in full.....
Address.....
Date.....

THE DEVON CONSOLS TIN MINING COMPANY (LIMITED).

Notice is hereby given, that the LIST OF APPLICATIONS FOR SHARES in this company will be CLOSED on THURSDAY NEXT, the 24th inst.
By order of the Board, T. SPILLMAN, Sec. pro tem.
8, Lancaster-place, Strand.

THE UNITED MERTHYR COLLIERIES COMPANY (LIMITED).

Capital, £120,000, in 6000 shares of £20 each.
Deposit, £1 per share on application, and 30s. on allotment.
Calls not to exceed £2 10s. per share, nor to be made at intervals of less than three months.
DIRECTORS.
GEORGE BROCKELBANK, Esq., Director of the General Steam Navigation Company.
JOHN HICKIE, Esq. (Messrs. Hies, Borman, and Co.), 127, Leadenhall-street, Director of the Thames and Mersey Marine Insurance Company.
ALFRED T. JAY, (Messrs. G. H. and A. T. Jay), 15, Tokenhouse-yard, London.
CHARLES MORRIS, Esq., Director of the Bank of Australasia.
CHARLES PROTHERO, Esq., Langibay Castle, near Uak, Monmouthshire.
Sir EDWIN PEARSON, K.B., F.R.S., Wimbledon, Surrey, Director of the Scottish Australian Investment Company.
Colonel PROTHERO, Hooton Robert, Rotherham, Yorkshire.
JOHN S. RIVOLTA, Esq. (Messrs. A. Rivolta and Sons), 1, East India Avenue, Director of the London and Buenos Ayres Bank.
BROKERS—Messrs. Joshua Hutchinson and Son, 15, Angel-court, E.C.
BANKERS—The Consolidated Bank, 7, Fenchurch-street, London, and at Manchester.
Messrs. Arthur Heywood, Sons, and Co., Liverpool.
SOLICITORS—Messrs. Bevan and Whiting, 6, Old Jewry.
SECRETARY (pro tem.)—Mr. C. R. Prince.
TEMPORARY OFFICES—1, LAURENCE POUNTNEY HILL, CANNON STREET.

ABRIDGED PROSPECTUS.

The extraordinary demand for Welsh steam coal, coupled with the rise in its market value of at least 25 per cent., has induced the proprietors of two of the principal producing collieries in South Wales, whose properties adjoin, to enter into arrangements with this company for uniting their respective holdings and plant.
A special value is given to the united properties beyond the acreage and plant by the fact that over 400 acres of coal are at once brought into profitable working, without any additional outlay.
The present daily output of coal from the two collieries is about 500 tons, but under this arrangement a minimum yield of 800 tons per day will be obtainable almost immediately.
With this output, the cost of production is estimated not to exceed 7s. 6d. per ton, delivered free on board at Cardiff, Swansea, or Newport; and the average contract price for delivery at these ports being 9s. 3d. per ton (the selling price of the day is 11s. to 12s. per ton), the profit would amount to £21,000 on the year's working, or 21 per cent. per annum on a paid-up capital of £100,000.
Application for shares may be made to the brokers or the bankers of the company, or to the secretary, from any of whom prospectuses can be obtained.

BRITISH AND FOREIGN STOCK, SHARE, AND MINING OFFICES, No. 2, WINCHESTER BUILDINGS, GREAT WINCHESTER STREET, LONDON, E.C.

Messrs. FULLER AND CO. continue to BUY AND SELL EVERY DESCRIPTION OF SHARES IN BANKS, CANALS, MINES, RAILWAYS, and GOVERNMENT STOCK, either for money or account. Stock Exchange business effected upon the usual commission.
Telegraphic messages promptly attended to, and every information supplied, either personally or by letter. Office hours, from Ten to Four o'clock.
Bankers: The Metropolitan and Provincial, Cornwall.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN RE HAWKMOOR MINE.
TO BE SOLD, pursuant to an Order made in a Cause Fisher v. Lawther and Others, dated the 24th day of November last, BY PUBLIC AUCTION, at the Registrar's Office, Truro, on Wednesday, the 30th day of March inst., at Twelve o'clock at noon,
65 (7219ths) SHARES of the defendant Samuel Lawther;
65 (7219ths) SHARES of the defendant Thomas May;
40 (7219ths) SHARES of the defendant Charles Hudson;
10 (7219ths) SHARES of the defendant Robert Downing;
120 (7219ths) SHARES of the defendant Richard Jones;
252 (7219ths) SHARES of the defendant Edmund Nogie;
25 (7219ths) SHARES of the defendant James Venning; and
25 (7219ths) SHARES of the defendant Edgar Williams Yarrow,
Of and in the said MINE. JOSEPH ROBERTS, Truro.
(Agent for R. W. Childs, Plaintiff's Solicitor, 25, Coleman-street, London).
Dated Registrar's Office, Truro, March 15, 1864.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN RE SOUTH CONDUROW MINE.
TO BE SOLD, pursuant to an order made in a Cause Vivian the younger v. Ashwell and Others, dated the 16th day of December last, BY PUBLIC AUCTION, at the Registrar's Office, Truro, on Wednesday, the 30th day of March inst., at Twelve o'clock at noon precisely,
5 (6138ths) SHARES of the defendant E. Hazeldine;
50 (6138ths) SHARES of the defendant John Hunter;
20 (6138ths) SHARES of the defendant William Mitchell;
5 (6138ths) SHARES of the defendant J. Paul;
20 (6138ths) SHARES of the defendant John Skinner and Richard Terrey;
3 (6138ths) SHARES of the defendant William Semmons;
1 (6138th) SHARE of the defendant Thomas Tyack; and
50 (6138ths) SHARES of the defendant J. Venning,
Of and in the said MINE.
HODGE, HOCKIN, AND MARRACK, Solicitors, Truro.
(Agents for S. T. G. Downing, Plaintiff's Solicitor, Redruth).
Dated Registrar's Office, Truro, March 14, 1864.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN THE MATTER OF THE COMPANIES ACT, 1862, and of the SOUTH CLIFFORD UNITED MINING COMPANY.—Notice is hereby given, that ALL CREDITORS of the ABOVE-NAMED COMPANY are REQUIRED, on or before Thursday, the 24th day of March inst., to SEND IN THEIR NAMES AND ADDRESSES, and the AMOUNTS and PARTICULARS of THEIR SEVERAL CLAIMS on the said company to William Mitchell, Esq., the Registrar of the said Court, at Truro.—Dated 16th March, 1864.

CORNWALL.

IN THE MATTER OF THE COMPANIES ACT, 1862, and in the MATTER OF THE CORNUBIA TIN MINING COMPANY (LIMITED).—TO BE SOLD, BY AUCTION (by direction of the liquidator appointed under an extraordinary resolution of the company), by Messrs. HANCOCK and BENT, at their auction rooms, in Leeds, in the county of York, on Monday, the 21st day of March inst., at Three o'clock in the afternoon, subject to such conditions as shall be then and there produced, ALL that the INTEREST of the said COMPANY of and in a certain INDENTURE OF GRANT, DEMISE, or MINING SETT, dated the 20th day of November, 1860, for the term of 21 years, by virtue of which the mining operations of the said company have for some time past been carried on at Roche, near St. Austell, in the county of Cornwall.
The mine may be inspected at any time prior to the sale, and further particulars obtained of Mr. JOHN DIGBY FOWELL, of Leeds, accountant, the liquidator of the company; or of Messrs. UPTON and YEWDALL, solicitors, Leeds.—Leeds, March 2, 1864.

IN THE MATTER OF THE CORNUBIA TIN MINING COMPANY (LIMITED), and in the MATTER OF THE COMPANIES ACT, 1862.—A special extraordinary resolution of the Cornubia Tin Mining Company (Limited) having been carried, whereby it was resolved that the company should be wound-up voluntarily, and Mr. John Digby Fowell, of Leeds, in the county of York, accountant, should be appointed liquidator of the said company, notice is hereby given that ALL CREDITORS of the said company are REQUIRED, on or before the 1st day of April next, to SEND IN THEIR NAMES AND ADDRESSES, and the AMOUNTS and PARTICULARS of THEIR SEVERAL CLAIMS on the said company, to John Digby Fowell, at his office, No. 3, Park-row, in Leeds aforesaid.
UPTON and YEWDALL, Solicitors to the Liquidator.
Dated this 2d day of March, 1864.

TO QUARRY PROPRIETORS, CONTRACTORS, GRANITE MERCHANTS, AND OTHERS.

TO BE SOLD, IN ONE LOT, BY PRIVATE TENDER, to be sent in on or before Twelve o'clock on the 4th of April, 1864, under the Companies Act, 1862, with the approval of His Honour the Master of the Rolls (with a view to its immediate winding-up), the VALUABLE and IMPORTANT QUARRY GRANTS over the COMMONS and WASTE LANDS in WALKHAMPTON, DARTMOOR, near PRINCE TOWN, in the county of DEVON, and also the several WOODS called DEVERSTONE WOOD, COMMON WOOD, and CADDAFORD AND CADWORTH WOODS, and a portion of WIGFORD DOWN, near BUCKLEY, on the Plymouth and Tavistock Railway, held on lease respectively by the HAYTOR GRANITE COMPANY, and in the working of which from 200 to 300 men have been hitherto employed. Together with the manager's house and 20 cottages occupied by the workmen at Fogintor, at the Dartmoor Quarries; the company's wharf, called the NORTH DEVON WHARF, in BUCKLAND MONACHORUM, in the county of DEVON; the smithy, stables, and sheds at Dreverstone; and the large yard at Laina, near the iron bridge over the Catwater, Plymouth; with the company's workshops, smithy, offices, and other buildings; as also the right of shipping at the harbour of Catwater, and at the River Laina, near Plymouth, in the county of Devon; and, also, the superior and costly plant of derricks, saw-chains, railway-wagons, rolling stock, machinery, utensils, together with the goodwill, contracts, stock of granite and assets of that IMPORTANT UNDERTAKING, THE HAYTOR GRANITE COMPANY, which is now in course of liquidation by the official liquidator appointed by the Court of Chancery, pursuant to an order to wind-up the said company, dated the 7th day of November, 1863, and the business of which company is now being carried on solely with a view to a sale.
Sealed tenders to be sent in addressed to R. F. HANCOCK, Esq. (the official liquidator), at his office, 5, Bank-buildings, London, E.C., on or before Twelve o'clock on the 4th day of April, 1864. A deposit of £2000 will be required on the tender being certified by the chief clerk of the Judge to whose court the winding-up order is attached, and subject to the approval of the said Judge. A portion of the purchase-money will be accepted in approved bills at approved dates, or in shares of any approved company.
Forms of tender, particulars and conditions of sale, and orders to view may be obtained gratis at the office of the said official liquidator, who will give orders to view the property. Particulars and conditions of sale may likewise be obtained at the offices of Messrs. HANCOCK, BEAL, and HANCOCK, 19, Bedford-row, London, W.C. solicitors; at the offices of Messrs. FARRAR and Co., 24, Bedford-row, London, W.C. solicitors; at the offices of Messrs. FARRAR and Co., 24, Bedford-row, London, W.C. solicitors; and at the principal hotels in Exeter; and at Messrs. GRANT and INNES, writers to the signet, Princes-street, Edinburgh.
GEORGE WHITING, Chief Clerk.

EXTENSIVE MINERAL PROPERTY, near GOSMONT, in the NORTH RIDING OF YORKSHIRE.

TO BE SOLD, BY PRIVATE CONTRACT, all that VALUABLE free ESTATE, situated in the township of GOATHLAND, in the parish of PICKERING, in the NORTH RIDING of the COUNTY OF YORK, containing about THREE HUNDRED ACRES of ARABLE, MEADOW, PASTURE, and WOOD LAND, with common rights on Goathland Moor.
The estate contains the VALUABLE IRONSTONE strata of the district, and EXTENSIVE SEAMS of FREESTONE, JET, &c. The celebrated Whinstone dyke runs through the property.
The estate is distant about seven miles from the town and port of Whitby, and is intersected by the Whitby and Pickering branch of the North-Eastern Railway, and is in close proximity to the Gosmont Junction of the North Yorkshire and Cleveland branch of the same railway, now nearly completed, and to the Gosmont Ironworks, at present in full operation.
A considerable part of the purchase money may remain on mortgage.
Plans and particulars may be obtained on application to JAMES FARRAR, Esq., Pickering (the owner); JOHN FARRAR, Esq., 24, Micklegate, York; JOHN BOLLAY, Esq., land surveyor, Whitby; Messrs. RICHARDSON, GUTCH, and RICHARDSON, solicitors, York; or Messrs. WALKER and HUNTER, solicitors, Whitby.—Whitby, March 1, 1864.

TO BE SOLD, THE GYFELLON COLLIERY, in the RHONDDA VALLEY, situate about 14 miles from the port of Cardiff. No. 2 and No. 3 seams, which are bituminous, and make first-class coke, have been won, and are now producing upwards of 100,000 tons a year, and that quantity may be increased to 150,000 tons a year at a small expense.

The celebrated Aberdare steam coal seams lie below the No. 3, and may be easily and inexpensively won and worked by the present shafts.
The shafts, machinery, and all the arrangements, are of the most modern and approved description.
For further particulars, and to treat for purchase, apply to SAMUEL DORSON, Esq., C.E., Cardiff.

TO BE SOLD, BY TENDER, THE COED CYNRIC SILVER LEAD MINE, near MOLD, in the county of FLINT.

This mine is situate in the parish of Llanferris, and is between the Catho and Gwernynydd vein on the north side, and the celebrated Mansyryn on the south side, and about half a mile from each, and in precisely the same stratification of carboniferous limestone rocks. The two last-named veins have realised to their proprietors not less than £100,000 each.
This mine, in a similar manner to the other veins, has also in the upper strata realised a very considerable profit, and is now in a position by shafts, levels, and machinery to pierce the lower strata, in which the greater deposits are usually found. The engine-shaft being at present 125 yards deep, complete, with engine, pitwork, &c.
The late Capt. S. Eddy, agent to the Duke of Devonshire, who made an underground inspection of the mine, reported it as his opinion that £1000 would be sufficient to sink the engine-shaft into the bearing measures, and effectually develop the property.
The machinery consists of an excellent 36 in. cylinder high pressure, expansive, and condensing beam engine, on the Cornish principle, together with boiler, and connections, 125 yds. of 10 in. pump work, 10 fms. of spare pumps, capstans, shears, and ropes, all in complete working order, 200 yards of new wooden brammock rods, bobs, and connections, 100 yards of 7 in. pitwork, capstans, shears, and ropes, all in complete working order, 2 horse whipsaws, pits and kibbles, smiths and carpenters' shops, tools, &c., weighing machine up to 10 tons, ladders, dressing-floors, office, and other useful mining materials, comprising every requisite for extensive working. The mine is held on lease, at the low royalty of £1000.
For further information respecting the mine, apply to Mr. HARRISON, solicitor, Well-street, Holywell, to whom sealed tenders must be sent, on or before the 29th day of March, 1864.

MR. JOHN CHIESMAN WILL SELL, BY AUCTION, at the Hall and Mouth Hotel, Leeds, on Tuesday, the 12th April next, at Two o'clock in the afternoon, an excellent WATER WHEEL, 34 ft. diameter, and quite new.—For further particulars, and order to inspect, apply to the Auctioneer, at his offices, Victoria Chambers, South Parade, Leeds.

BALLESWIDEN MINE, ST. JUST.
ENGINE AND SPARE MATERIALS FOR SALE, BY PRIVATE CONTRACT.—A 45 in. PUMPING ENGINE (by Harvey and Co.), 10 ft. in the cylinder, 9 ft. in shaft, with ONE BOILER about 8 tons, and first piece of rod in shaft, shears, capstan, angle and balance bobs; 12, 9, 7, and 6 in. 9 ft. pumps, 12 and 9 in. plunger poles, 12 and 7 in. H and top doorpieces, rod plates, 35 pairs, 4 to 6 in.; 12 and 7 in. windbobs, a lot of 12 and 10 in. rods, beside flat-rod shears, and other spare materials.
The whole are in excellent condition, and may be viewed, and all particulars had of the agents, on the mine; or of the purchaser, RICHARD V. DAVY, Offices, 112, Market-Jew-street, Penzance.

TO IRONMASTERS, IRON SHIPBUILDERS, ENGINEERS, &c.—BY PRIVATE SALE, on the RIVER TYNE, FORTY-EIGHT ACRES of FREEHOLD LAND, in the parish of WALLSEND. It is unimproved for situation, having a large and deep water frontage to the river, and is intersected by the Tynesmouth branch of the North-Eastern Railway. There is a large mansion house, cottages, offices, &c., on the ground, clay for brickmaking, &c.—For particulars, apply to Mr. J. THOMSON, 5, Dean-street, Newcastle-upon-Tyne.

IMPORTANT TO COAL PROPRIETORS, CAPITALISTS, AND OTHERS.—THE OWNERS of VALUABLE MINES of COAL, lying within and under a compact freehold estate of 150 acres, situate about three miles from the important manufacturing town of Blackburn, Lancashire, are PREPARED to treat for the ABSOLUTE SALE of the COAL, or to enter into favourable arrangements for leasing the same for a term of years. Good turnpike roads intersect the estate, and the same is within very easy distance of railway and canal.—For further particulars, apply to Messrs. ROBINSON and SOX, solicitors, Blackburn.

TO CAPITALISTS.—THE PROPRIETORS of a COLLIERY in full work, and now producing upwards of 100,000 tons of the best bituminous coal per annum, are DESIROUS of DISPOSING OF THE LEASE they hold. The quantity now worked may be doubled without extra expense, if required. The property is situated within 15 miles, by rail, of the port of Cardiff.—Particulars may be obtained of D. RANDALL, Esq., solicitor, South.

TO CAPITALISTS.—TO LET, ON LEASE, on very advantageous terms, a very VALUABLE MINERAL PROPERTY, in one of the best districts in CORNWALL, containing several very rich TIN and COPPER LODES. None but principals treated with.—Address, "K. J.," MINING JOURNAL office, 26, Fleet-street, London, E.C.

MINERAL INVESTMENTS.—TO LET, very easily wrought IRON DEPOSITS, HEMATITES, and CHALIBITE ORES. Veins 10 feet wide, and proved. And TWO fine SETTS of ROCK COPPER ORES.—Apply to "Y. Z.," Post-office, Edinburgh.

CHILTON COLLIERY.—TO BE LET, by the Trustees of the Right Honourable the Earl of Eidon, all the VALUABLE SEAMS of COAL lying under the GREAT and LITTLE CHILTON ESTATES, belonging to the Earl of Eidon, situated near FERRYHILL, in the county of DURHAM, and containing together about 1240 acres.
A shaft has been sunk on the Little Chilton estate, and the upper seams—viz., the "Five Quarter" and the "Main Coal," have been worked under a portion of the estate. The former is found at 40 fms. from the surface, 4 ft. 4 in. thick, and the main coal at 52 fms. from the surface, 3 ft. 6 in. thick, both seams producing coals well suited for house consumption.

A boring has also been made to the Harvey seam, 81 fms. below the main coal, and found to have a section of 3 ft. 7 in., and it is believed that this seam will produce the description of coal for which so great a demand exists for coking and manufacturing purposes.
The boring was not continued below the Harvey seam, but it is confidently expected, judging from other sinkings made in the neighbourhood, that the Brockwell seam will also be found, this being an extremely valuable seam, and well adapted for house consumption or coking.
The estates are intersected by the West Hartlepool and North-Eastern Railways, by means of which great facilities are afforded for sending the coal and coke for shipment, for land sale, and for supplying the great and increasing demand for manufacturing ironstone now so extensively worked in the adjoining district of Cleveland.
A sufficient number of cottages for the workmen required for an extensive colliery, also agents' houses and offices, have been built on the estate, and are the property of the Earl of Eidon.
The situation of this property, its favourable position as regards the Cleveland ironstone district, and the abundance of coal and limestone underneath the estates, suggest the locality as being well suited for the erection of blast-furnaces and ironworks.
The new lease can have the current going stock belonging to the lessors at a valuation. Further particulars may be obtained on application to Mr. John Johnson, mining engineer, Tynesmouth, Northumberland.—Tynesmouth, March 17, 1864.

EXTENSIVE IRONSTONE ESTATE.—TO BE LEASED, for a term of years, the IRONSTONE STRATA, in all that extensive property in the township of ESKDALESIDE, in the parish of WHITBY, YORKSHIRE, belonging to Edward Donkin, Esq., Mrs. Ann Noble, and Mr. Thomas Boyes, and containing altogether about 285 acres.
The estate is intersected by the North-Eastern Railway, and is near the Castleton and Gosmont junction of the same railway, and is distant about five miles from the port of Whitby.
The mineral is of excellent quality, and open to the day, the land has a gradual descent to the railway, and it may be safely said that the property now offered forms one of the most desirable royalties in the Cleveland district.
Mr. Boyes, one of the tenants, will show the property, and plans and further particulars may be obtained on application to him; to EDWARD DONKIN, Esq., Barmby Moor, near York; or to Messrs. WALKER and HUNTER, solicitors, Whitby.
Whitby, March 10, 1864.

MONMOUTHSHIRE.

TO BE LET, an EXTENSIVE COAL FIELD, between Risca and Abercarn, and within 5½ miles of the port of Newport, containing the well-known RISCA BLACK VEIN, together with all the other seams of coal that have been proved by the Risca and Abercarn pits.—For particulars, apply to ALEXANDER BASSETT, Esq., C.E., Cardiff.

HORIZONTAL ENGINES FOR SALE, at very low prices.

One 12 in. cylinder, 24 in. stroke; one 12 in. cylinder, 36 in. stroke; and two 14 in. cylinders, 24 in. stroke. All ready for delivery, and may be had with or without fly-wheels.—Apply to Messrs. E. PAGE and Co., Laurence Pountney-place, Laurence Pountney-hill, Cannon-street, E.C.

ON SALE, a FIRST-CLASS NEW HORIZONTAL STEAM ENGINE, has 12 in. cylinder, 2 ft. stroke, with strong link motion to valve for reversing. Very suitable for agricultural purposes. Price, £75. Also, one same size, with governor complete. Price, £75. Other sizes proportionately low.—Apply to Isaac W. BOUTTON, Ashton-under-Lyne.

FOR SALE, 194 in. FORCING PUMP, 14 in. LIFTING PUMP, HAND PUMPS, pumping crank, lifting screw, pit chain, and other colliery material.

Apply to Mr. JOHN FAULKER, Nailsea, near Bristol.

WANTED, the FOLLOWING NEW or SECOND-HAND MACHINERY.

A 10 horse power, adapted for connecting machinery by both belts and gearing. A STEAM CRANE, to lift from 2 to 3 tons from a depth of from 40 to 60 ft., either fixed or portable, and adapted for traversing, swivelling, raising, and lowering by the engine. Also, a small DERRICK CRANE, to be worked by hand, and capable of lifting 2 tons or upwards; and a FEW TONS of NEW or SECOND-HAND BRIDGE RAILS, of from 12 to 14 lbs. per yard.—Offers to be addressed to Mr. F. ENSOR, No. 18, Clarendon-street, London.

PEAT MANUFACTURES.—THE ATTENTION of CAPITALISTS INTERESTED in the MAKING of a SUPERIOR QUALITY of IRON is CALLED to a PROCESS of MAKING a HARD FUEL FROM PEAT, which will be readily dried, and which can be carbonised in a most expeditious and efficient manner, retaining all the carbon, at very low prices. The quantity to be treated per day is only limited by the capital employed. A large tract of peat, free from sulphur, is secured, with ample water-power, and near a railway. Every information afforded in confidence to principals.—Address, "Geologist," MINING JOURNAL office, 26, Fleet-street, London, E.C.

PEAT AND IRON.—These can be found adjoining each other in England as well as Ireland, and both of first-rate quality. The manufacture of a large scale of peat for smelting purposes is now well understood, and a great profit is to be made, and a superior class of iron obtained.—For particulars, address by letter, "J. B.," 32, Ironmonger-lane, E.C.

TO ENGINEERS, IRONFOUNDERS, AND OTHERS.

IMPORTANT IMPROVEMENT IN PUMPS.—The English Press has already declared the merits of the new system of double-acting pumps—the LOCOMOBILE PUMPS—invented by Mr. DELPHEC, in which the ordinary valves are replaced by elastic spheres of vulcanised India-rubber, and the certified experiments made under the direction of General Morin, at the Imperial Conservatory of Arts and Industry, at Paris, prove that SEVENTY PER CENT. of the POWER EMPLOYED is UTILISED.

The pumps are applicable to all varieties of purposes, and can at any time be changed in a few moments to suit the uses for which they may be required. They are CHEAP, NOT LIABLE to GET OUT OF ORDER, and CANNOT BECOME CHOKED by any substance capable of entering the tube.

Mr. DELPHEC is PREPARED to EXECUTE ALL ORDERS for PUMPS of ANY SIZES with which he may be favoured, or will TREAT for the TRANSFER of his ENGLISH PATENT, either to a company or to an established manufacturer, who will give special attention to the development of the invention.

Mr. DELPHEC being compelled to return to France forthwith, will offer highly favourable conditions to engineers or others desirous of negotiating with him, and provide a small fixed quarterly payment be secured to him a very small immediate money payment will be required. The quarterly payment required would be covered by the profits of the sale of 12 pumps annually.

Mr. DELPHEC will also offer favourable terms for transferring his patent right for America, Portugal, Italy, Germany, Russia, Sweden, Holland, and Belgium.
For further particulars, either as to the pumps or the patents, address Mr. DELPHEC, Crown Wharf, Great Scotland-yard, Whitehall, or 7, Northumberland-street, Strand.

ASSAYS AND ANALYSES UNDERTAKEN at MODERATE CHARGES, by MR. ARTHUR EVANS, LECTURER on CHEMISTRY, NORMAL COLLEGE, SWANSEA.—Parcels to be directed Mr. A. EVANS, 12, High-street, Swansea.

THE NEW COMBARTON SILVER-LEAD MINING COMPANY (LIMITED).
Registered under the Companies Act, 1862, whereby the liability of the shareholders is strictly limited to the amount of their respective shares, and Table A in the Act adopted as the rules and regulations of the company.
Capital, £16,000, in 8000 shares of £2.
5s. to be paid on application, and 10s. on allotment.
No further call to be made until the expiration of a year; and then no instalment to exceed 5s. per share, nor at intervals of less than three months.
DIRECTORS.
BARNETT SMITH, Esq., Elm-court, Temple, Deputy-Chairman of the Tewkesbury and Malvern Railway.
JAMES BANCHE, Esq., Broxbourne, Hertis, Director of the Tamar, Kitt Hill, and Calington Railway.
Major-General SHOTREDE, the Rowans, Lee-road, Blackheath.
MOFFATT C. W. HORNE, Esq., Ilfracombe, and Gailford-street, Russell-square, London, W.C.
WILLIAM YOUNG, Esq., Bath Houses, Instow, Devon, J. P.
JOHN A. PARRY, Esq., Holland House, Barnstaple.
PHILIP STONEHAM, Esq., Ilfracombe, F.R.C.S.
BANKERS—London: The City Bank, Threadneedle-street.
Barnstaple: West of England and South Wales District Bank.
SOLICITORS—Messrs. Frichard and Collette, 57, Lincoln's Inn-fields, W.C.
BROKER—Mr. Edward Cooke, 75, Old Broad-street, E.C.
SECRETARY—Mr. George Frederick Goodman.
OFFICES,—7, GEORGE YARD, LOMBARD STREET, E.C.

ABRIDGED PROSPECTUS.
The object of this company is to explore and work a very valuable piece of mineral ground situated in the silver-lead district of Combarton, in the north of Devon, which in ancient and modern times produced so much wealth, the grant of which valuable ground this company have succeeded in obtaining after much negotiation.
The set comprises the estates of West Chalcot and Leicester, and is granted for a term of 21 years, at 1-15th royalty. It extends over 150 acres of mineral ground, about three-quarters of a mile long on the course of the lodes, and is adjacent to the celebrated Old Combarton Mines, which have paid such handsome dividends to its shareholders.
There is an excellent stream of water for dressing and other purposes, and the carriage of materials, and freight of ore, &c., cannot be less anywhere than in this mine.
The ore already raised from this set is of first-rate quality, and the reports hereto appended show that, under judicious management, a most profitable mine at a small outlay will be the result. Indeed it is questionable if more than the allotment deposit will be needed.
£17 5s. per ton has been offered for the ore by Messrs. Sims and Williams, Llanelly.
The present proprietors of this valuable property have agreed to accept out of the proposed capital the sum of £4000 in paid-up shares in the capital of the company.
The works will be commenced when one-half of the shares offered to the public are subscribed for.
Prospectuses, together with plans of the property, detailed reports from Capt. John Treweek, Wm. Treweek, John Blamey, William Newton, Alfred S. Kingdon, and William Phillips, and forms of application for shares, can be obtained, and specimens of the ore seen, on application to the secretary, at the offices of the company, and at Mr. J. D. Tynon's Foundry, Barnstaple.

THE FRONTINO AND BOLIVIA (SOUTH AMERICAN) GOLD MINING COMPANY (LIMITED).
Incorporated under the Companies Act, 1862, by which the liability of the shareholders is limited to the amount of their shares.
Capital £100,000, in 50,000 shares of £2 each. Deposit, 5s. on application, and 5s. on allotment.
A further call of 5s. six months after allotment. Subsequent calls, if necessary, not to exceed 5s. per share, and not to be made at intervals of less than three months.
From careful calculation, it is estimated that not more than 20s. per share will be required.
DIRECTORS.
P. G. VANDERBYL, Esq., 3, Upper Hyde Park Gardens (Director of the Cape Copper Company)—CHAIRMAN.
GEORGE BRAGINTON, Esq., Banker, Torrington, Devon (Director of the London and Provincial Marine Insurance Company).
O. H. MAUDE, Esq., 19, St. George's-square, Belgravia (Director of the United Kingdom Telegraph Company).
AMBROSE MOORE, Esq., London and Epsom.
MICHAEL HINGSTON, Esq., Huddersfield, North Devon.
J. G. RUSSELL, Esq., The Willows, Enfield Green (Director of the Terricoll Mining Bankers).
The London and County Bank, Lombard-street, London, and its various branches.
W. Compton Smith, Esq., 48, Lincoln's Inn-fields, London.
Messrs. Walker and Lumsden, 25, Austinfriars, London.
ADVISOR.
William Montes, Esq., King's Arms-yard, Moorgate-street, London.
SUPERINTENDENT AT THE MINES.
Capt. William Goyen.
AGENTS AT MEDILLIN.
Messrs. Marcelino Restrepo and Sons.
SECRETARY.
Mr. W. G. Powning.
OFFICES.
192, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C.

ABRIDGED PROSPECTUS.
This company is formed for the purchase and working of the celebrated Frontino and Bolivia Gold Mines and Works, in New Granada, South America.
The reports of Capt. Goyen and other reliable authorities, made from personal observation, designate these mines as equal, if not superior, to any in the known world.
No charge whatever will be made for preliminary expenses up to the time of allotment.
Applications for shares may be made to the London and County Bank, Lombard-street, or any of its branches; or to the brokers or secretary of the company. Allotments will be made according to priority of application, and in cases of non-allotment the deposit will be returned without deduction.
Plans and sections of the property, with specimens of rich gold ore from the mines, and a model of Captain Goyen's machinery, may be seen at the offices of the company, where prospectuses, reports, and every information may be obtained.
THE FRONTINO AND BOLIVIA (SOUTH AMERICAN) GOLD MINING COMPANY (LIMITED).
Notice is hereby given, that NO FURTHER APPLICATIONS FOR SHARES in this Company will be RECEIVED after WEDNESDAY, the 24th inst.
By order of the Board,
W. G. POWNING, Secretary.
192, Gresham House, Old Broad-street.

THE ROSSA GRANDE GOLD MINING COMPANY (LIMITED).
Incorporated under the Companies Act, 1862, by which the liability of the shareholders is limited to the amount of their shares.
Capital, £100,000, in 100,000 shares of £1 each.
First issue, 50,000 shares, of which one-fourth have been subscribed for privately.
Deposit, 2s. 6d. per share on application, and 2s. 6d. per share on allotment.
No call to exceed 5s. per share, at less than three months.
DIRECTORS.
GEORGE NOAKES, Esq. (Managing Director Great Wheal Vor United Mining Company), Gresham House, Old Broad-street.
E. R. NEILL, Esq., Parliament-street (Consul General for Monte Video).
BARNETT L. PHILLIPS, Esq. (Director European Bank).
P. KOE, Esq. (Director London and Birmingham Bank).
W. JONES, Esq. (Director British National Life Office).
A. SCHOALES, Esq. (Director of the London and Birmingham Bank).
Capt. J. R. HARRIS (Director of Les Grandes Mines Consolidées de Villenagagne).
C. W. WHITE, Esq., Hibernia Chambers, London Bridge.
AGENTS IN BRAZIL.
Messrs. Alexander Fry and Co., Rio de Janeiro.
CONSULTING ENGINEER IN ENGLAND.
Capt. J. Dalley, St. Austell, Cornwall, formerly Chief Mining Engineer to the St. John del Rey Gold Mining Company in Brazil.
BANKERS.
London and Westminster Bank, Lombury.
London and Birmingham Bank, Chancery-lane; and New-street, Birmingham.
SOLICITORS—Messrs. Hancock, Sharp, and Hales, 20, Tokenhouse-yard.
BROKER—Francis Burnand, Esq., 78, Lombard-street.
AUDITORS—Messrs. Cash and Edwards, Tokenhouse-yard.
SECRETARY (pro tem.)—J. J. Truran, Esq.
TEMPORARY OFFICES,—25, FOLTRY, LONDON, E.C.

ABRIDGED PROSPECTUS.
The object of this company is to purchase and work an extensive gold mining property, called Rossa (Rocha) Grande, in the province of Minas Geraes, Brazil, estimated as containing about 21 square miles, in the vicinity of the celebrated mine of the St. John del Rey Company. The purchase-money is to be £15,000 in cash, and an equal amount in shares.
Capt. Thomas Trevelyan, in his elaborate report, says:—
"The rock is chiefly clay and talcose slate, of that character which is highly congenial to auriferous formations, and when I add that the lodes are not very distant from the junction of slate and granite, every experienced miner will understand its significance. Gold mines in Brazil, as well as copper and tin mines in England, are valueless when far from the mysterious effect of the junction of these great rocks. The estate contains three distinct auriferous formations, which can be traced for miles, besides a rich lode unexplored. Diamonds are said to have been found at one spot. The first rock formation is of white quartz and iron, and has yielded from half to five ounces of gold per ton; the second is of yellow quartz and auriferous arsenical pyrites, and has afforded upwards of six ounces of gold per ton; the third is of quartz and brown oxide of iron, and about 36 feet wide. In depth it will probably graduate into a pyrite rock formation, similar to that of the St. John del Rey Company's mines at Morro Velho. The whole mass of this lode is auriferous, and portions of it have yielded 50 ounces of gold per ton. It only requires capital, economy, and practical experience to make these lodes as remunerative as the Rock Mine of the St. John del Rey Company," which has already paid £273,750 in dividends, and one share in which, with £15 paid, is now worth £22.
Full reliance is to be placed upon Capt. Trevelyan's report, from the fact that he has had 16 years' experience in Brazil, in the service of the St. John del Rey Company, and is chief engineer to the Don Pedro North del Rey Gold Mining Company, which, under his management, has paid a dividend at the rate of 10 percent. on its first nine months' working.
Capt. Jno. Dalley, who has long known Rossa Grande, confirms the above report. The late Mr. George Vincent Duval, Brazilian mining commissioner, also, in a work written by him, favourably mentions Rossa Grande, classing it with Morro Velho (St. John del Rey), and says:—"These mines might be aptly termed gold quarries."
Prospectuses and copies of the reports, with a map, and forms of application for shares, may be obtained of the broker, of the solicitors, or at the offices of the company.

MR. GEORGE SHEPHERD, CIVIL, MINING, AND CONSULTING ENGINEER.
Letters addressed 26, Throgmorton-street, London, E.C.

NICHOLLS, WILLIAMS, AND CO., ENGINEERS, REDFORD IRONWORKS, TAVISTOCK.
MANUFACTURERS OF STEAM ENGINES OF EVERY DESCRIPTION, made on the BEST AND NEWEST PRINCIPLES. We beg most especially to call the attention of the public to the manufacture of our BOILERS, which have been tested by most of our leading engineers. PUMP WORK CASTINGS OF EVERY DESCRIPTION, both of brass and iron. HAMMERED IRON AND HEAVY SHAFTS OF ANY SIZE. CHAINS made of the best iron, and warranted. RAILWAY WORK OF EVERY DESCRIPTION.
ALL ORDERS FOR ABROAD RECEIVE THEIR BEST ATTENTION. NICHOLLS, WILLIAMS, AND CO. have had 20 years' experience in supplying machinery to foreign mines, and selecting experienced workmen to erect the same, where required.
Messrs. NICHOLLS, WILLIAMS, AND CO. have always a LARGE STOCK OF SECOND-HAND MINE MATERIALS in stock, and at moderate prices.

MESSRS. W. DERRY AND CO., MINING MATERIAL MERCHANTS, ST. AUSTELL, respectfully inform the mining public that they have constantly on SALE EVERY DESCRIPTION OF MINING PLANT, in STEAM ENGINES, pitwork, and dressing appliances, which they are prepared to offer on very advantageous terms, and such as will especially commend themselves to the projector of new undertakings.—Applications to be addressed as above, or to the engineer of the company, Mr. W. H. GRAY, St. Austell.
Dated St. Austell, August 12, 1863.

WILLIAM MATHEWS, ENGINEER, TAVISTOCK, has FOR SALE:—ONE 30 in. CORNISH PUMPING ENGINE, with BOILER 9 tons; ONE 14 in. HORIZONTAL WHIM ENGINE and cage, with BOILER 4½ tons; TWO 10 horse PORTABLE ENGINES, for winding or pumping; ONE CORNISH CRUSHER; ONE 30 ft. diameter WATER WHEEL, 9 ft. breast, iron axle, sockets and rings; 60 fms. of 3 in. flat-rods, with pulleys.

SHORTIDGE, HOWELL, AND CO., HARTFORD STEEL WORKS, SHEFFIELD, SOLE MANUFACTURERS OF HOWELL'S PATENT HOMOGENEOUS METAL PLATES FOR BOILERS, LOCOMOTIVE FIRE BOXES, and TUBES, COMBINING THE STRENGTH OF STEEL WITH THE MALLEABILITY OF COPPER. RUSSELL AND HOWELL'S PATENT CAST STEEL TUBES. McCONNELL'S PATENT HOLLOW RAILWAY AXLES.—For prices and terms, apply to Shortridge, Howell, and Co., Hartford Steel Works, Sheffield; or Messrs. HARVEY AND CO., 12, Haymarket, London.

RAILWAY CARRIAGE COMPANY (LIMITED). ESTABLISHED 1847.
OLDBURY WORKS, NEAR BIRMINGHAM.
MANUFACTURERS OF RAILWAY CARRIAGES AND WAGONS, and EVERY DESCRIPTION OF IRONWORK.
Passenger carriages and wagons built, either for cash or for payment over a period of years.
RAILWAY WAGONS FOR HIRE.
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THE BIRMINGHAM WAGON COMPANY (LIMITED) IS PREPARED TO SUPPLY RAILWAY WAGONS OF EVERY DESCRIPTION, capable of carrying 6, 8, or 10 tons, at annual rentals, or for purchase on deferred payments, on advantageous terms.
EDMUND FOWLER, Sec.
OFFICES,—3, NEWHALL STREET, BIRMINGHAM.

BEST MANGANESE SPIEGELEISEN DELIVERED AT ANY PORT OF THE UNITED KINGDOM.—For testimonials, and all information, apply to Wm. Bird and Co., 2, Lawrence Pountney-hill, London, E.C.

COAL CUTTING MACHINERY.—THE WEST ARDSLEY COMPANY, having, by recently patented improvements, perfected their coal cutting machinery, worked by compressed air, are NOW READY TO MAKE CONTRACTS FOR THE CONSTRUCTION AND USE OF THEIR MACHINES. The results of twelve months' experience in the working of these machines, by the West Ardsley Company, have proved most satisfactory, their use being found to CHEAPEN THE COST AND IMPROVE THE AVERAGE SIZE OF THE COAL, TO LIGHTEN THE LABOUR, and also TO MODIFY THE SANITARY CONDITION OF THE MINE. All communications to be made to Messrs. FIRTH, DONISTHORPE, and BOWER, No. 8, Britannia-street, Leeds.

NOTICE.—THE WEST ARDSLEY COMPANY, having reason to believe that their patents are being infringed upon, hereby give notice that they will TAKE LEGAL PROCEEDINGS AGAINST ALL PARTIES who may MAKE FOR SALE, OR USE ANY MACHINERY in the construction of which any such INFRINGEMENT IS MADE.

EDWARDS'S PATENT MINERAL ORE AND COAL WASHING MACHINE.—This is by far the MOST ECONOMICAL, as well as the MOST PERFECT MACHINE MADE. Each machine is capable of washing 20 to 60 tons per diem, according to quality.—Full particulars, testimonials, &c., may be obtained from E. EDWARDS, Esq., C.E., 1, York-buildings, Adelphi, where a working model may be seen.
Adopted by the Governments of Great Britain, Spain, Denmark, Russia, Brazil, East and West Indies.

EASTON'S PATENT BOILER FLUID, FOR REMOVING AND PREVENTING INCORUSTATION IN STEAM BOILERS, LAND AND MARINE.
P. S. EASTON AND G. SPRINGFIELD, Patentees and Sole Manufacturers.
37, 38, and 39, WAPPING WALL, LONDON, E.
Or of their Agents in the principal towns of Great Britain and the Colonies.

DANIEL COLLINGE AND SON'S PATENT SPONGE CLOTHS. LEVER, of this city, SOLE AGENT for the SALE OF OUR PATENT SPONGE CLOTHS in the MINING DISTRICTS OF GREAT BRITAIN.
Manchester, March 5, 1864.
I shall be glad to SUPPLY SAMPLES and PRICES OF DANIEL COLLINGE AND SON'S PATENT SPONGE CLOTHS, which are a VALUABLE SUBSTITUTE FOR COTTON WASTE in the CLEANING OF ENGINES and MACHINERY.
23, Marden-square, Manchester. ELLIS LEVER.

CORNISH CRUCIBLE AND BLACK-LEAD POT MAKER, JOHN JULEFF, FORT STREET, and PEDN-AN-DREA, REDRUTH.

MESSRS. C. SCHIELE AND CO., ENGINEERS, INVENTORS, PATENTEES, AND SOLE MANUFACTURERS OF SCHIELE'S PATENT TURBINE WATER WHEELS OF 1863. SCHIELE'S PATENT SILENT FANS OF 1863. SCHIELE'S PATENT CENTRIFUGAL PUMPS OF 1863. SCHIELE'S PATENT BLAST AND VENTILATING ENGINES OF 1863. SCHIELE'S PATENT TURBINE STEAM ENGINES OF 1863. SCHIELE'S PATENT MARINE VENTILATORS OF 1863. SCHIELE'S PATENT MINE VENTILATORS OF 1863. SCHIELE'S PATENT EXHAUSTERS OF 1863. SCHIELE'S PATENT COMPOUND FANS OF 1863. SCHIELE'S PATENT COMPOUND BLAST ENGINES OF 1863. SCHIELE'S PATENT GOVERNOR OF 1863. SCHIELE'S PATENT WAVE POWER MACHINERY OF 1860. SCHIELE'S PATENT CRUSHING MILLS OF 1860.
WORKS,—CHORLTON WORKS, COULPLAN STREET.
OFFICES,—2, CLARENCE BUILDINGS, BOOTH STREET, MANCHESTER.
ALL MACHINERY ERECTED BY US GUARANTEED.

The following is copied from the "Manchester Examiner and Times," Oct. 21, 1863:—
SCHIELE'S WATER TURBINE.—A remarkably ingenious improvement has been effected by Messrs. C. Schiele and Co., of this city, in the invention of the water turbine, or wheel. Wherever a stationary engine is fixed a water turbine may now take its place, effecting an entire saving of coal and engineering, besides taking away all risk from fire or explosions. They are so compact that one, measuring 4 in. by 3 in. deep, will work a large organ, by being fixed in the ordinary way to the water-pipe. The water pressure during the day in Manchester, by the Corporation Waterworks, is equal to 47 lbs. to the square inch, and at night it is 70 lbs. to the square inch; here, then, is a motive-power applicable to many purposes to which it has never yet been applied. The power of the turbines varies from that of a boy to that of 1000 horses and upwards. From the peculiar construction of the turbines, also, it is impossible for them to become choked with leaves or sticks, as is the case with most other turbines. Several small ones are fixed, and are working machines of various sorts in Manchester, and the demand for them is so great that they bid fair to supplant the major portion of the stationary engines now in use, where a cheap supply of water can be had. They are applicable to domestic, commercial, and agricultural purposes, and may be placed in drawing, dining, breakfast rooms, or cellars; they are always ready for work, and may be set going or stopped at any moment by simply turning a tap. They will work printing presses, printing-machines, coffee mills, tobacco-cutting machines, fans, threshing-machines, hoists, and drive hydraulic presses. The size of the little machines, which may be carried in the hand, and the work they do, are in remarkable contrast, and it is only by seeing one at work that its real importance and value can be appreciated. Several of them may thus be seen by applying at the offices of Messrs. SCHIELE and Co., Clarence-buildings, Booth-street.
For other opinions of the press see "Manchester Guardian," Oct. 13, 1863; "Manchester Courier," Oct. 24, 1863; "Salford Weekly News," Oct. 24, 1863; "Preston Guardian," Oct. 24, 1863.

ASSAYS AND ANALYSES OF EVERY DESCRIPTION Conducted by JOHN MITCHELL, F.C.S., M.G.A. (Established 20 years).
Author of "Manual of Practical Assaying," "Metallurgical Papers," &c.
All communications and samples to be addressed (free) to Mr. MITCHELL, care of Mr. P. Clay, 29, Great St. Helen's, London, E.C.

MESSRS. WILLIAMS, BRAY, AND CO. beg to inform their mining friends and the public generally that, in consequence of the numerous applications and requests they have received, they now UNDERTAKE THE INSPECTING AND REPORTING ON MINES.
The several members of the firm having had many years' experience in mining in all its branches is the best guarantee of their ability in such matters; and they trust that, by carefully examining the mines they visit, and faithfully reporting thereon, and by constantly watching the progress of both old and new undertakings, they will be able to supply a want that has been greatly felt in the district, and give every information and advice that may be required.
OFFICES, 44, MARINE TERRACE, ABERYSTWYTH.

MR. GEORGE HENWOOD, MINING ENGINEER, LOCHHEAD HOUSE, LOCHWINNOCH, SCOTLAND, OFFERS HIS SERVICES AND ADVICE on mines situated in any part of England, Scotland, Wales, Ireland, Isle of Man, &c. Mr. Henwood's extensive experience in his peculiar department of mining science is well known, and will be exerted to the utmost for the benefit of his clients.

Tavistock Ironworks, Devon.—(Established 1804.)
GILL AND CO., ENGINEERS AND IRONFOUNDERS, MANUFACTURERS OF STEAM ENGINES AND BOILERS. CHAINS OF ALL DIMENSIONS. STEELED SHOVELS to any pattern. EVERY DESCRIPTION OF CAST AND HAMMERED IRON FOR MINING, MANUFACTURING, and AGRICULTURAL PURPOSES.
HAMMER MILLS. EDGE TOOL MANUFACTORY.
FOREIGN MINES SUPPLIED ON LIBERAL TERMS.
VARIOUS DESCRIPTIONS OF SECOND-HAND MACHINERY CONSTANTLY ON HAND.
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CLAYTON, SHUTTLEWORTH, AND CO., ENGINEERS, MANUFACTURERS OF PORTABLE AND FIXED STEAM ENGINES, MACHINERY FOR PUMPING, HOISTING, GRINDING, SAWING, &c. ENGINES FOR STEAM CULTIVATION, SELF MOVING ENGINES FOR COMMON ROADS and AGRICULTURAL PURPOSES GENERALLY.
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SPECIAL DRAWINGS WHEN REQUIRED.
THE BEST STEAM THRASHING MACHINERY MADE.

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BOUKS, KIBBLES, BOILERS, IRON BLOCKS, and BLOCK CHAINS. RAILWAY COUPLINGS, HORSE TRACES, CRANE CHAINS, and SHIP'S CABLES.
MANUFACTORY, COALPORT, SHROPSHIRE.

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AVELING AND PORTER'S PATENT TRACTION ENGINES AND LOCOMOTIVES FOR MINERAL RAILWAYS.
For prices, illustrated description, and testimonials, apply to AVELING and PORTER, engineers, Rochester, Kent.

Exhibition Medal, 1862.
WEIGHING MACHINERY, CONSISTING OF PLATFORM WEIGHING MACHINES and HIND'S PATENT RAIL and ROAD WEIGHBRIDGES, overhead TRAVELLING WEIGHING CRANES and CRABS, RAILWAY WEIGHING TURNABLES, &c.
CRANES
Of the WALL, PILLAR, PORTABLE, or TRAVELLING KINDS; and CRABS and WINCHES for STEAM or HAND POWER, &c. Also, TURNABLES, WATER COLUMNS, TANKS, and PUMPING MACHINERY, and GENERAL RAILWAY PLANT, manufactured by
RICHARD KITCHIN, ENGINEER AND IRONFOUNDER, SCOTLAND BANK IRONWORKS, WARRINGTON.

Prize Medal Awarded Great Exhibition, 1851, and International Exhibition, 1862.

PATENT SAFETY FUZE WORKS, TUCKINGMILL, CORNWALL.—We beg respectfully to inform the public that since the decease of the late Mr. THOMAS DAVEY this firm has consisted of JOHN SOLOMON BICKFORD, GEORGE SMITH, FRANCIS PRYOR, SIMON DAVEY, and WILLIAM BICKFORD SMITH. It is requested that all letters may be addressed, and all cheques and drafts made payable to us, as
BICKFORD, SMITH, AND CO.

THE CORNWALL BLASTING POWDER COMPANY beg to announce to the consumers of gunpowder that, their extensive mills and premises being now completed, they are PREPARED TO SUPPLY their PATENT BLASTING POWDER in LARGE or SMALL QUANTITIES.
It is considerably LIGHTER THAN ORDINARY GUNPOWDER, and being equal in strength, bulk for bulk, a SAVING OF ONE-FOURTH OF THE COST IS EFFECTED.
It creates but a small amount of smoke, thereby occasioning little delay to operations after explosion.
It can be rendered suitable for either slate or granite quarries, where it is desirable to protect the stone from being broken into fragments.
IT DOES NOT BECOME DAMP or WASTEFUL by exposure to the atmosphere, and none of the component parts being of a nature subject to decay, it requires to be dealt with simply as ordinary gunpowder, although it will be found practically UPWARDS OF TWENTY-FIVE PER CENT. CHEAPER.
St. Allen Powder Mills, near Truro, February, 1864.

ABERYSTWTH FOUNDRY COMPANY (LIMITED).—This company's extensive FOUNDRY and FORGE WORKS are NOW IN FULL OPERATION. MACHINERY AND CASTINGS OF EVERY DESCRIPTION will be EXECUTED WITH ACCURACY and DISPATCH, under the care of Mr. THOMAS STROKE, from Messrs. HARVEY and Co., Ironfounders, Hayle, Cornwall.
FULL PRICES will be GIVEN for OLD CASTINGS, SCRAP IRON, and BRASS delivered at the company's works, opposite the railway station, Aberystwith.

NEW COMBINED TURBINE, WINDING, AND PUMPING MACHINERY, MANUFACTURED BY GEORGE LOW, MILLGATE IRONWORKS, NEWARK-UPON-TRENT.
Who respectfully begs to bring the above to the notice of the mining public, as an exceedingly cheap and easy method of applying water-power for the above purposes.
The TURBINE, WINDING, and PUMPING MACHINERY are all fixed complete to one strong cast-iron bed plate, which can be placed in any situation without pit or excavation, and any height not exceeding 33 ft. from bottom of fall, the supply and suction pipe being all that is required to be connected to it, and can be brought in any direction. This combined machine can be easily removed when necessary.
G. Low begs also to state that the TURBINE is the most efficient and the cheapest method of applying water-power for mining purposes.
MANUFACTURER OF WINDING, PUMPING, CRUSHING, STAMPING MACHINERY, WINDING ENGINES, WATER WHEELS.
IMPROVED TURBINE WATER WHEELS CONSTRUCTED either to WORK VERTICALLY or HORIZONTALLY, and upon the MOST SCIENTIFIC and EFFECTIVE PRINCIPLE.
G. Low begs to recommend a special class of turbine adapted for extreme high falls (200 to 500 ft.), and consuming small quantity of water. This turbine will work with equal advantage without running at an excessive velocity. Also, MANUFACTURER OF IMPROVED BORING MACHINES FOR DRIVING ADITS.

CREASE'S PATENT EXCAVATING MACHINERY, FOR SUPERSEDING THE SLOW AND EXPENSIVE USE OF MANUAL LABOUR in SINKING SHAFTS, DRIVING LEVELS, TUNNELLING, &c., is guaranteed to drive through any rock of average hardness at a minimum rate of 1 fm. per diem, and to sink shafts at the rate of 2 fms. in three days.
Mr. CREASE will undertake contracts for sinking shafts, driving levels, &c., at an enormous reduction of time and great saving in cost.
Applications to be addressed (for the present) to the patentee, Mr. E. S. CREASE, Tavistock, Devon.
By providing the power of calculating the time and cost to explore a certain depth and extent of ground, speculation in mining will be assimilated to commercial pursuits, with this unmistakable advantage—that when the ground has been once carefully and judiciously selected, and operations properly and systematically carried out for its development, there would be far less chance of unsatisfactory results than are met with by merchants and manufacturers in the usual routine of their business. As this important invention must beneficially interest the landowners, mine proprietors, merchants, and miners, we opine it will meet with immediate adoption.—*Miners Journal*.
LEICESTER AND CO. (late Leicester, Brache, and Teague), CONSULTING MINING ENGINEERS AND SURVEYORS, and GENERAL MINING AGENTS, MELBOURNE, VICTORIA, PROCURE MINING LEASES ON ELIGIBLE TERMS FROM THE GOVERNMENT OF VICTORIA and NEW SOUTH WALES, on receipt of a remittance for £200, to cover costs of lease, survey and report, &c. Messrs. LEICESTER and CO. OFFER TO TAKE THE MANAGEMENT OF MINING COMPANIES, and PROVIDE OFFICE ACCOMMODATION, for a percentage on the profits of the company.
For further particulars, apply to Mr. RICHARD MIDDLETON Mining Journal office, 16, Fleet-street, London, E.C.
All remittances must be made through our bankers, the Union Bank of Australia.

Now ready, price 6s.
STATISTICS OF AND OBSERVATIONS UPON THE MINES OF CORNWALL AND DEVON.
For 1861, 1862, and 1863.
By THOMAS SPARGO, Mining Engineer, Stock and Sharebroker, Gresham House, Old Broad-street, London, E.C.
This work contains the following particulars, viz.:—The geological position, present prospects, name of purser, manager, and secretary, with annual returns of each mine during the last three years, and total dividends paid to the present time.
It is illustrated by a map of Cornwall, showing its parliamentary division, and population; geological district maps, divided into four sections, in which are shown the boundary lines of each parish, height of hills, sources of rivers, &c., together with maps of St. Just, St. Ives, Marazion, Gwinnar, Chiverton, Bodmin, Liskeard, Devon Great Consols, and Tavistock mining districts, showing boundary lines of each sett, with the lodes, veins, and cross-courses traversing the same. It also contains longitudinal and transverse sections of the Dolcoath Mine (kindly supplied by Capt. Charles Thomas), with report upon the same; sections of the workings at Botallack, corrected down to the present time by the manager (S. H. James, Esq.), with historical account of same; surface plans and sections of all the leading mines in both counties, with observations upon each, including geological map of the Fowey Consols district (kindly furnished by Major Davis, R.M.), as also all the information necessary for the guidance of those unacquainted with mining.

READ THE NEW MEDICAL GUIDE, written by a Physician, for the Self Cure of Nervousness, Indigestion, Loss of Memory, Dimness of Sight, Lassitude, &c. This work is illustrated with hundreds of cases and testimonials from patients, showing the treatment by which they were cured. Free by post to any address, on receipt of a stamped directed envelope.—Address to Messrs. SMITH, 8, Burton-crescent, Tavistock-square London, W.C.

THE MINING SHARE LIST

BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Dividends Per Share.	Last paid.
1200	Alderley Edge (cop.), Cheshire [L.]	10 0 0	—	—	2 13 0	0 15 Feb. 1884
4000	Bedford United (copper), Tavistock	2 6 8	—	—	13 4 0	0 20 Jan. 1884
1248	Bocawell (tin, copper), St. Just	6 15 0	—	10 1/2	1 0 0	0 0 Feb. 1884
200	Botalack (tin, copper), St. Just	91 5 0	—	—	474 15 0	0 0 Feb. 1884
8000	Bronfryd (lead), Cardigan [L.]	2 7 6	—	—	0 16 0	0 26 Jan. 1884
916	Cargill (silver-lead), Newlyn	15 5 7	—	—	7 5 0	1 5 Feb. 1884
3100	Clifford Amalgamated (cop.), Gwent	30 0 0	35	34 1/2 35 1/2	30 15 6	0 10 Feb. 1884
40000	Copper Mines of England (stock)	25 0 0	—	—	7 1/2 per cent.	— Half-yrly.
867	Cwm Erfin (lead), Cardiganshire [L.]	7 10 0	—	—	1 per cent.	— Half-yrly.
128	Cwmystwith (lead), Cardiganshire	60 0 0	—	—	10 13 0	0 15 Jan. 1884
1024	Devon Gt. Con. (cop.), Tavist. [S.E.]	1 0 0	—	—	891 0 0	0 0 Nov. 1883
868	Dolcoath (copper, tin), Camborne	128 17 6	—	—	748 10 0	0 0 Feb. 1884
12800	Drake Walls (tin, copper), Calstock	2 1 0	40s.	38s. 39s.	0 18 0	0 16 May. 1883
512	East Basset (cop.), Redruth [S.E.]	29 10 0	67	64 66	117 0 0	2 0 Jan. 1884
6144	East Caradon (copper), St. Cleer [S.E.]	3 14 6	31	29 1/2 30	9 2 6	0 19 Jan. 1884
300	East Darnell (lead), Cardiganshire	52 0 0	—	—	93 10 0	2 0 Feb. 1884
120	East Pool (tin, copper), Pool, Illogan	24 8 0	—	—	367 10 0	7 10 Feb. 1884
1306	East Whallog (tin), Wendron	2 18 6	—	—	1 0 0	0 7 Jan. 1884
2800	Foxdale (lead) Isle of Man [L.]	25 0 0	27	—	62 0 0	1 0 Sept. 1883
5000	Frank Mills (lead), Christow	3 18 0	—	—	0 6 0	0 0 Nov. 1883
12500	Great Laxey (lead), Isle of Man [L.]	4 0 0	—	—	0 6 0	0 0 Feb. 1884
1788	Great Whallog (tin), Breage	18 6 0	14 1/2 16 1/2 17 1/2	—	0 15 0	0 10 Mar. 1884
5908	Great Wh. Vor (tin, cop.), Helston [S.E.]	40 0 0	37	39 1/2 40 1/2	3 7 6	0 10 Mar. 1884
119	Great Wh. Vor (tin), Germoe	100 0 0	—	—	5 0 0	0 0 Feb. 1884
1024	Herodfoot (id.), near Liskeard [S.E.]	8 10 0	—	—	28 0 0	1 15 Feb. 1884
400	Lisburne (lead), Cardiganshire, Wales	18 15 0	—	—	415 10 0	3 0 Dec. 1883
9000	Marke Valley (copper), Cardigan	4 10 6	7	6 1/2 6 3/4	2 12 0	0 16 Jan. 1884
1800	Minera Mining Co. (L.), Wrexham	25 0 0	—	—	135 10 0	7 0 Feb. 1884
20000	Mineral Co. of Ireland (cop., lead, coal)	7 0 0	—	—	16 7 4	0 9 July. 1883
40000	Mynydd Iron Ore (L.) [S.E.]	2 10 0	—	—	0 2 0	0 0 Mar. 1884
250	Nanty Mines (lead), Montgomery	20 0 0	—	—	0 5 0	1 0 Dec. 1883
6000	New Birch Tor and Vitrifer Cons. (tin)	1 0 0	3	—	0 13 0	0 0 Feb. 1884
6401	Par Consols (cop.), St. Blazey [S.E.]	1 2 6	—	—	36 19 0	0 26 Mar. 1883
200	Parys Mines (copper), Anglesey [L.]	50 0 0	—	—	82 10 0	10 0 Oct. 1883
1772	Polberron (tin), St. Agnes	15 0 0	—	—	7 19 6	0 10 Nov. 1883
512	Polberron (tin), St. Agnes	8 0 0	—	—	1 0 0	1 0 July. 1883
1123	Providence (tin), Uny Lelant [S.E.]	10 6 7	43 1/2 42 1/2 43 1/2	—	72 5 0	1 5 Feb. 1884
6000	Rosewell Hill and Ransom United	2 16 0	—	—	0 10 0	0 16 June. 1883
412	South Caradon (cop.), St. Cleer [S.E.]	1 5 0	455	460 460	426 10 0	0 0 Jan. 1884
812	South Tolgus (cop.), Redruth, Cornwall	0 0 0	—	—	74 10 0	1 0 May. 1883
496	S. Wh. Frances (cop.), Illogan [S.E.]	18 15 0	65	—	370 18 6	1 0 Nov. 1883
4000	St. Day United (tin), Redruth	14 0 0	—	—	489 10 0	1 0 Feb. 1884
840	St. Ives Consols (tin), St. Ives	8 0 0	—	—	14 8 6	0 10 Mar. 1884
6000	Tincroft (cop., tin), Pool, Illogan [S.E.]	9 0 0	20	19 19 1/2	24 18 0	0 0 Jan. 1884
6000	West Basset (copper), Illogan [S.E.]	1 10 0	—	—	1 10 0	0 15 Jan. 1884
2000	Wh. Chiverton (id.), Perranzabuloe [S.E.]	—	85	82 84	45 0 0	1 0 Jan. 1884
266	West Damsel (copper), Gwennap	38 10 0	—	—	45 0 0	1 0 Jan. 1884
400	Wh. Seta (cop.), Camborne [S.E.]	47 10 0	180	215 225	401 0 0	4 0 Feb. 1884
512	Wh. Seta (cop.), Illogan [S.E.]	5 2 6	95	87 1/2 92 1/2	687 0 0	1 10 Feb. 1884
1000	Wh. Seta and Grylls (tin)	7 0 0	17	16 1/2 17 1/2	3 0 0	0 10 Oct. 1883
1024	Wh. Seta (tin), Perranzabuloe	2 4 0	—	—	6 2 0	0 0 Sept. 1883
412	Wh. Seta (silver-lead), Kea	5 4 0	—	—	14 0 0	0 0 Mar. 1884
4295	Wh. Seta (tin), St. Agnes	5 4 0	—	—	9 7 6	0 0 Feb. 1884
1024	Wh. Seta (tin), Uny Lelant [S.E.]	2 0 6	14 1/2	—	76 5 0	1 0 May. 1884
896	Wh. Margaret (tin), Uny Lel. [S.E.]	9 17 6	20	18 19	67 17 6	0 10 Mar. 1884
1024	Wh. Mary Ann (id.), Menheniot [S.E.]	8 0 0	15	13 1/2 14	338 8 0	5 0 Feb. 1884
896	Wh. Seta (tin), St. Just, Cornwall	70 0 0	—	—	165 15 0	4 0 Feb. 1884
1040	Wh. Trelawny (sil.-id.), Liskeard [S.E.]	5 17 0	33	23 24	49 0 0	0 15 Feb. 1884
2044	Wh. Tremayne (tin), Gwennap	6 11 3	—	—	0 15 0	0 0 Nov. 1883
7000	Wicklow (copper), L. Wicklow	2 10 0	—	—	14 5 0	1 6 Aug. 1882

* Dividends paid every two months. † Dividends paid every three months.

BRITISH MINES WITH DIVIDENDS IN ABEYANCE.

240	Boscan (tin), St. Just	20 10 0	—	33 35	36 10 0	1 0 Mar. 1882
1600	Carn Brea (copper, tin), Illogan	15 0 0	—	—	278 10 0	2 0 Feb. 1882
3000	Chiverton (lead), Perranzabuloe [S.E.]	5 0 0	13	12 1/2 13 1/2	85 0 0	2 0 June. 1887
256	Condurow (cop., tin), Camborne	35 0 0	90	80 90	1 7 0	0 7 May. 1882
2450	Cook's Kitchen (copper), Illogan	17 15 0	20 1/2	—	2 7 6	0 0 Sept. 1882
1024	Copper Hill (copper), Redruth	0 0 0	—	—	12 0 0	0 0 June. 1882
1355	Craddock Moor (copper), St. Cleer	0 0 0	13 1/2	12 14	0 10 0	0 0 June. 1882
280	Derwent Mines (sil.-lead), Durham	300 0 0	—	—	0 10 0	0 0 Feb. 1883
4076	Devon and Cornwall (cop.), Tavistock	3 16 8	—	—	0 17 6	0 26 Jan. 1884
3000	Dyffrynwm (lead), Wales	12 0 0	—	—	41 9 2	0 26 Jan. 1884
940	Fowey Consols (copper), Tywardreath	4 0 0	—	—	7 18 6	0 0 Dec. 1881
6000	Great South Tolgus [S.E.], Redruth	0 14 6	4	—	0 8 0	0 16 Mar. 1882
10240	Gunnis Lake (Clitters' Adit)	0 2 0	—	—	1091 0 0	0 0 May. 1882
160	Levant (copper, tin), St. Just	2 10 0	—	—	18 18 1	0 7 Aug. 1882
640	Mold Pleasant (lead), Mold	4 0 0	—	—	0 10 0	0 0 Mar. 1882
5000	Orsed (lead), Flintshire	0 0 0	—	—	0 8 0	0 0 Dec. 1882
8000	South Exmouth (lead), Christow	1 2 0	—	—	9 15 1	0 0 June. 1882
280	Spearw. Moor (tin, copper), St. Just	31 17 9	—	—	7 0 0	0 10 Sept. 1882
572	Trelyn Consols (tin), St. Ives	12 0 0	12	—	11 0 0	2 0 Mar. 1882
1000	Trumpet Consols (tin), near Helston	11 10 0	—	—	8 15 0	1 0 Jan. 1881
12000	Twelve Apostles Amalg. (id.), Wrexham	1 0 0	—	—	14 10 0	3 0 June. 1881
4200	Vigna and Colago (copper) [L.]	3 5 0	—	37 39	101 1 3	0 10 Oct. 1882
1024	Wendron Consols (tin), Wendron	15 13 10	7 1/2	—	0 19 0	0 0 May. 1882
60	West Burton Gill (lead), Yorkshire	50 0 0	—	—	2400 10 0	0 0 Feb. 1881
1024	West Caradon (cop.), Liskeard [S.E.]	5 0 0	23	20 22	254 5 0	4 0 Mar. 1882
6100	West Fowey Consols (tin and copper)	7 10 0	—	—	—	—
128	Wh. Friendship (copper), Devon	80 0 0	—	—	—	—
100	Wh. Mary (tin), Lelant	36 2 6	—	—	—	—

FOREIGN DIVIDEND MINES.

20000	Australian (cop.), S. Australia [S.E.]	7 7 6	—	—	0 1 0	0 1 Dec. 1883
2464	Burra Burra (cop.), South Australia	5 0 0	—	76	310 0 0	0 0 June. 1883
6000	Central American (silver) [L.]	5 0 0	—	—	4 6 8	0 14 Dec. 1883
12000	Cobre Copper Co. (cop.), Cuba [S.E.]	40 0 0	35	33 35	99 12 0	1 0 Jan. 1884
100000	Don Pedro No. Del Rey [L.] [S.E.]	0 10 0	—	—	0 0 0	0 9 Dec. 1883
70000	English and Australian [S.E.]	5 0 0	—	—	1 10 0	0 26 Feb. 1884
15000	East Indian Coal, Calcutta [L.]	10 0 0	—	—	7 1/2 per cent.	— Yearly.
25000	Fortuna (lead), Spain [L.] [S.E.]	2 0 0	4	3 1/2 4	0 11 4	0 3 Feb. 1884
25000	Gen. Mining Assoc., Nova Scotia [S.E.]	30 0 0	—	—	19 15 0	0 10 Jan. 1883
60000	Kapunda Mining Co., Australia [S.E.]	1 0 0	—	—	0 11 0	0 10 Jan. 1883
15000	Linares (id.), Pozo Ancho, Spain [S.E.]	3 0 0	7 1/2	6 7	9 11 2	0 5 Oct. 1883
10000	Pontigbaud (all.-lead), France [S.E.]	30 0 0	—	—	1 7 3	0 3 Jan. 1884
97500	Port Phillip (cop.), Clines [S.E.]	1 0 0	1 1/2 1 1/2 1 1/2	—	0 11 0	0 16 Jan. 1884
11000	St. John del Rey [L.], Brazil [S.E.]	15 0 0	82	—	61 5 0	3 0 Dec. 1883
43174	Unit. Mexican (sil.), Mexico [S.E.]	28 5 0	—	6 1/2 7 1/2	2 9 0	0 7 May. 1883
10000	Vancouver (all.) [L.]	5 0 0	—	—	0 5 0	0 0 Oct. 1883
20000	West Canada Mining Company [L.]	1 0 0	—	—	0 7 0	0 30 Nov. 1883
45000	Yudamutana (cop.), S. A. [L.] [S.E.]	3 0 0	3	3 1/2 3 1/2	0 5 0	0 0 Aug. 1883

FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

10000	Altan and Qasmangen Unt. (cop.) [L.]	4 10 0	—	—	4 5 0	0 15 Nov. 1883
10000	Coplopi Mining Company, Chili [S.E.]	16 0 0	—	—	6 18 0	0 10 Nov. 1882
10000	Gt. Barrier Land, Min. Ac. N. Z. [L.]	10 0 0	—	—	15 per cent.	— May. 1889
10000	Lusitania (of Portugal) [S.E.]	2 0 0	—	—	0 19 0	0 1 Feb. 1882
10815	Marquitta and New Granada [S.E.]	1 0 0	—	—	0 9 6	0 16 July. 1889

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
00000	Anglo-Brazilian (gold) [L.] [S.E.]	0 5 0	—	—	Dec. 1883
00000	Alamillos (lead), Spain [L.]	0 10 0	—	—	Oct. 1883
00000	Bearis Tin Streaming Company [L.]	0 17 6	—	—	Fully paid.
70000	Bon Accord, South Australia (copper) [L.] [S.E.]	1 0 0	—	—	Fully paid.
18000	Cape Copper Mining Company [L.] [S.E.]	7 0 0	10 1/2 10 1/2 11	—	Feb. 1884
25000	Capula (silver), Mexico [L.] [S.E.]	1 0 0	—	—	Jan. 1884
17000	Central Italian (copper) [7000 £2 paid]	0 6 0	—	—	Jan. 1883
40000	Clarendon Consols (copper), Jamaica [S.E.]	1 2 6	—	—	July. 1882
10000	Coplopi Smelting [L.], Chili	10 0 0	—	—	Fully paid.
75000	Dun Mountain (copper), New Zealand [L.] [S.E.]	1 0 0	—	—	Fully paid.
25000	East del Rey (gold), Brazil [L.] [S.E.]	1 5 0	%	—	Oct. 1883
80000	East Kongsberg Native Silver Mining Co. of Norway [L.]	1 12 0	—	—	Dec. 1883
20000	Elbe Colliery Company, Bohemia [L.]	1 0 0	—	—	Fully paid.
80000	Ellerslie and Bardoyle (copper), Jamaica	0 18 0	—	—	July. 1889
8000	English and Canadian Mining Company [L.]	5 0 0	—	—	Fully paid.
40000	Fortune (copper), West Australia [L.]	2 0 0	—	—	Fully paid.
80000	Great Northern (copper), South Australia [L.] [S.E.]	1 10 0	—	—	June. 1882
24000	Hindustan (copper), Bengal [L.] [S.E.]	8 0 0	—	—	Feb. 1883
4000	Hope Silver-Lead and Copper Mining Co. [L.], Jamaica	25 0 0	—	—	Fully paid.
10000	Karibita Colliery Company [L.]	1 0 0	—	—	Fully paid.
30000	Lagunazo (sulphur, copper), Portugal [L.]	1 0 0	—	—	Fully paid.
100000	Montes Aures (gold), Brazil [L.] [S.E.]	2 0 0	2 1/2	2 1/2 2 1/2	Fully paid.
2000	New Burra Burra (copper) (Australia)	5 0 0	—	—	Aug. 1882
60000	New Granada (gold), South America [S.E.]	1 0 0	—	—	Fully paid.
10000	New Grand Duchy of Baden (silver-lead), near Freiberg	1 0 0	—	—	Nov. 1888
80000	North Rhine Copper of South Australia [L.] [S.E.]	0 17 6	—	—	Nov. 1882
50000	Nova Scotia (land and gold) [L.]	1 0 0	—	—	Nov. 1882
15000	Pachuca Silver Mining Company, Mexico [L.]	1 0 0	—	—	June. 1883
50000	Panuco (copper) [L.]	1 0 0	2 1/2	1 1/2 2 1/2	Feb. 1884
6000	Peel River Land and Mineral [Limited]	100 0 0	—	—	Stock.
23000	Quebrada (copper), Venezuela [L.]	4 10 0	—	—	Jan. 1884
10000	San Roque (lead), Spain	5 0 0	—	—	Fully paid.
60000	Santa Barbara (gold), Brazil [L.]	0 12 6	—	% %	Jan. 1884
190000	Scottish Australian Mining Company [L.]	0 17 6	—	—	Feb. 1884
15000	South Europe Mining Company, Spain [L.]	3 0 0	—	—	May. 1883
12000	Tepetit Colliery Co., Bohemia [L.]	3 0 0	—	—	Jan. 1884
5000	Valdegonz Mining Company [L.]	5 0 0	—	—	Jan. 1884
45000	Vallancasca (gold), Italy [L.] [S.E.]	0 7 6	—	—	Dec. 1883
45000	Victor Emanuel (copper), Italy [L.]	1 0 0	—	—	Fully paid.
1000	Western Africa Malachite (copper) [L.]	110 0 0	—	—	Oct. 1882
12000	Wheel Ellen (copper), South Australia [L.]	5 0 0	—	—	Fully paid.
80000	Worthing (copper), South Australia [L.] [S.E.]	1 0 0	1	1/2 1	Fully paid.